Pay : disparity, transparency, unfulfilled expectations and satisfaction : six studies of employees in Switzerland

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PAY: DISPARITY, TRANSPARENCY, UNFULFILLED EXPECTATIONS AND SATISFACTION

SIX STUDIES OF EMPLOYEES IN SWITZERLAND

Edited by Alexandra Arnold, Eva-Maria Aulich and Bruno Staffelbach

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EDITORIAL

Pay is a topic that has always been a primary concern for employees as well as employers. For employees, pay has a substantial impact on the general living conditions and status, whereas for employers, compensation represents one of the largest business costs (Williams, McDaniel & Nguyen, 2006). Bridging the expectations of both employees and employers, the increasing pay disparity within organizations due to rapidly increasing executive compensation is a hot topic in current societal debates. In 2013, CEOs of Swiss companies such as Nestlé, UBS, Roche and Novartis earned more than 10 million Swiss francs a year leading to extreme pay disparities between the lowest and highest salaries within those companies. These pay disparities between workers and CEOs have significantly increased during the last decades – not only in Switzerland. In the United States, for example, the CEO-to-worker pay ratio was 20:1 in 1965, peaked in 2000 with a CEO-to-worker pay ratio of 383:1, and was 273:1 in 2012 (Mishel & Sabadish, 2013). The results of the Swiss Earning Structure Survey 2012 of the Swiss Federal Statistical Office also support the increasing pay disparity gap also in Switzerland. While the nominal pay of the top 1 percent earners increased by 39 percent between 1996 and 2010, low and medium earners' pay only increased by 7 to 8 percent during the same period. Thus, such distribution inequalities between top, average and low earners continue to be a hot topic around the globe.

Increasing top management pay and distribution inequalities may also impact emploees' expectations about their own pay as well as their pay satisfaction. Specifically, the Swiss HR-Barometer 2012 showed that the discrepancy between employees' expected pay and their actual pay has increased considerably during the past few years in such a way that employees' pay expectations exceed their offered pay (Grote & Staffelbach, 2012). Such discrepancies in expectations can reduce employees' satisfaction and lead to further unfavorable outcomes. Besides expectations, social comparison processes also impact employees' pay satisfaction. For example, Judge et al. (2010) showed that the amount of pay received only has a marginally impact on pay satisfaction, whereas relative pay (comparing the own pay to others) seems to play a much stronger impact on how satisfied individuals are with their pay (Clark, Frijters & Shields, 2008).

The purpose of this publication is to shed light on different understudied areas in relation to pay such as pay disparity, pay transparency, unfulfilled pay expectations and pay satisfaction. By using data from the Swiss Human-Relations-Barometer 2008, six empirical studies were conducted, each addressing a fundamental research question:

1. *Does perceived pay disparity have an impact on employees' satisfaction with pay increase, and does gender, tenure, pay level and satisfaction with pay disparity moderate this relationship?*
2. *Does perceived pay disparity impact job satisfaction, and does an employee's career orientation moderate this relationship?*
3. *Does perceived pay transparency have an impact on turnover intention, and does the perceived pay disparity moderate this relationship?*
4. *Do unfulfilled pay expectations impact employees' attitudes, and does the orientation of the psychological contract moderate this relationship?*
5. *What is the impact of different pay elements on pay satisfaction, and does gender moderate this relationship?*
6. *Does pay satisfaction impact turnover intentions, and does leadership satisfaction moderate this relationship?*

All studies were conducted as part of the lecture "HRM Research" of the Chair in Human Resource Management at the University of Zurich. Master students worked in small groups of three to four students on one research question each and were supervised by the Chair's coaches. The research findings were presented to a wide audience of practitioners and researchers during a poster session at the end of the semester.

We thank the students for their engaged and meticulous work and Nadja Brylka for preparing and Jamie Lee Gloor for proofreading all manuscripts for this publication.

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PERCEIVED WAGE DISPARITY AND SATISFACTION WITH WAGE INCREASE: MODERATING EFFECT OF GENDER, TENURE, WAGE LEVEL AND SATISFACTION WITH WAGE DISPARITY

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Abstract: The current public discussion and the public vote in Switzerland underline the importance of dealing with the subject of wage disparity. The purpose of this study is to analyze the relationship between perceived wage disparity within a company and satisfaction with wage increase. Not only is the direct effect of perceived wage disparity on satisfaction with wage increase examined, but also the moderating effects of gender, tenure, wage level and satisfaction with wage disparity. Based on theoretical literature and existing empirical studies, we propose corresponding hypotheses and statistically examine their validity by using data of the Swiss Human-Relations-Barometer 2008, a representative data sample of 1,370 employees working for different industries in Switzerland. According to the empirical results, perceived wage disparity has a significant negative influence on satisfaction with wage increase. Moreover, we find evidence that gender moderates the relationship between perceived wage disparity and satisfaction with wage increase in such a way that men are more satisfied with wage increase if they perceive wage disparity as high than women. For tenure, wage level, and satisfaction with wage disparity, there was no statistical evidence of moderation.

Keywords: perceived wage disparity, satisfaction with wage increase, gender, tenure, wage level, satisfaction with wage disparity

Introduction

As a result of new corporate governance guidelines that were implemented in Switzerland in 2002 to support financial transparency, wages of the management of Swiss market-listed companies have to be revealed. Since then, the salaries of managers have been in the public eye, and a heated public dispute has arisen about how large the difference between highest and lowest salaries within a company, the so called wage disparity, should be. In March 2013, the "1:12 initiative" led to a national vote on regulating wage disparity within a firm, showing that people want to deal with wage disparity.

The effects of perceived wage disparity of employees, i.e., the workers' subjective view of the actual wage disparity, have been examined in several studies. Research results show that perceived wage disparity impacts workers' workplace effort, job satisfaction and intention to quit (Arnold, 2008, p. 61; Brunner, 2009, p. 233; Drago & Garvey, 1998, p. 17; Pfeffer & Langton, 1993, p. 397). In related research, Till and Karren (2011, p. 42) and Brown (2001, p. 883) found that individual equity within a company (defined as comparing one's own wage with wages of other workers) has effects on employees pay level satisfaction. Moreover, Heneman, Greenberger and Fox (2002, p. 69) argue that the sense of inequality to other employees inside the organization as well as perceived wage disparity play a main role for how satisfied a worker is with his pay increase, what we define as satisfaction with wage increase.

As the paper of Heneman et al. (2002) shows, pay satisfaction is one of the constructs that has received much attention in human resource management (HRM) research, indicating its practical relevance. Wage disparity increases are consistently also in the public eye in Switzerland since various employee groups strike calling for pay raises. Moreover, in motivation theory, wage increases are typical extrinsic stimuli used to increase employee motivation. With the background of the current public dispute about wage disparity in mind, it seems important for employers to know if perceived wage disparity within the company has a decreasing effect on satisfaction with wage increase. In that case, the motivational or satisfying effect of pay raises would be eliminated. Therefore, in this paper, we investigate the relationship between perceived wage disparity within a company and satisfaction with wage increase.

First, evidence for the relationship between perceived wage disparity and satisfaction with wage increase is provided by Heneman et al. (2002). The authors assume a negative impact of perceived wage disparity on satisfaction with wage increase Heneman et al. (2002, p. 69). However, the paper of Heneman et al. (2002) does not include any empirical research and evidence, but consists of a reconceptualization. Besides, studies that empirically investigate the impact of perceived wage disparity on satisfaction focus on general satisfaction, job satisfaction, or pay level satisfaction, but not on satisfaction with pay increase. The only study that empirically examined the relationship between perceived wage disparity and pay level satisfaction analyzed individual equity as comparison with workers on similar jobs (Till & Karren, 2011), the so called vertical wage disparity, whereas we define wage disparity horizontally as the spread between high and low wages in the overall company. Thus, there has been no empirical inquiry into the direct effects of perceived wage disparity within a company on satisfaction with wage increase.

Existing research shows that there are differences in the intensity of feeling job or income satisfaction and how strong satisfaction is influenced by factors such as wage disparity depending on the characteristics of the affected worker. Such differences were found in terms of gender (Arnold, 2008, p. 46; Sloane & Williams, 2000, p. 496), tenure (Pfeffer & Langton, 1993, p. 397), wage level (Brown, 2001, p. 892; Rambo & Pinto, 1989, p. 143; Pfeffer & Langton, 1993, p. 382-384) and satisfaction with wage disparity (Pfeffer & Langton, 1993, p. 384). Therefore, we suppose that gender, tenure, wage level, and satisfaction with wage disparity impact the relationship between perceived wage disparity and satisfaction with wage increase which is analyzed in this paper. As there has been no empirical inquiry into the effects of perceived wage disparity within a company on satisfaction with wage increase, potential moderating effects have also not been analyzed. Therefore, we will investigate if gender, tenure, wage level and satisfaction with wage increase have a moderating impact on the relationship between perceived wage disparity and satisfaction with pay increase.

As the facts used to show the social, political, and economic relevance of the topics of perceived wage disparity and satisfaction with wage increase are taken from Switzerland, we will investigate the relationship between perceived wage disparity and satisfaction with wage increase as well as the moderating influence of gender, tenure, wage level and satisfaction with wage disparity for Switzerland. For this purpose, we use data of the Swiss Human-Relations-Barometer 2008, a representative data sample of employees working for different industries in Switzerland. Thereby, we can act on the assumption that the employees in the data sample are affected by the public discussion about wage disparity and satisfaction with wage increase and likely to deal with these topics themselves, which makes the results of the study more reliable.

This paper provides one of the first empirical studies of the relationship between perceived wage disparity and satisfaction with wage increase by making the following contributions. Based on existing literature, we first analyze the direct impact of perceived wage disparity on satisfaction with wage increase. Second, we examine potential moderators such as gender, tenure, wage level and satisfaction with wage disparity that could influence the relationship between perceived wage disparity and satisfaction with wage increase. Third, we empirically examine the relationship between perceived wage disparity and satisfaction with wage increase and the moderating effects of gender, tenure, wage level and satisfaction with wage increase using data of the Swiss Human-Relations-Barometer 2008.

Theoretical Framework and Research Hypotheses

In a first step, we focus on the relationship between perceived wage disparity and satisfaction with wage increase. Most of the existing theories and studies in terms of the effects of wage disparity concentrate on the relationship between perceived wage disparity and general job satisfaction. Since satisfaction with wage increase can be seen as a part of the general job satisfaction (Grund & Sliwka, 2001, p. 1), we present theories and studies that deal with the relationship between wage disparity and general job satisfaction. The equity theory of Adams (1965, p. 280-283) states that perception of fair or unfair distribution of the resources within interpersonal relationships has an impact on job satisfaction. According to Adams (1965), an employee's satisfaction decreases if he or she perceives the distribution of wages not as proportional compared to the work input of other workers. Similarly, the inequality aversion theory of Fehr and Schmidt (1999, p. 821) says that individuals feel dissatisfaction as a result of inequality. Both theories lead to the assumption that a high perceived wage disparity within a company which can be seen as higher inequality and unfairness within this firm, lead to a decrease in job satisfaction.

The assumption based on the theories of Adams (1965) and Fehr and Schmidt (1999) was supported by several empirical studies. Pfeffer and Langton (1993, p. 397) showed that wage disparity is significantly and negatively related to job satisfaction. Also, an empirical analysis from Arnold (2008, p. 61) found a significant negative correlation between the perceived wage disparity and the general job satisfaction. According to these results, employees who perceive wage disparity as high are (without examining potential moderators) less satisfied with their job as employees who perceive the wage disparity as low.

Furthermore, empirical studies investigate the relationship between wage disparity and pay level satisfaction. Based on the equity theory of Adams (1965), Dreher (1981, p. 582) tested the hypothesis that high perceived wage equity will be in a positive relationship with pay satisfaction. The hypothesis was significant (Dreher, 1981, p. 586). Also, Till and Karren (2011, p. 49) examined the relationship between perceived equity and pay level satisfaction. They came to the conclusion that high perceived equity significantly and positively impacts the satisfaction with pay level. That means an employee who perceives high wage equity among his or her worker colleagues believes to be paid fairly, which in turn, leads to a higher wage level satisfaction. According to Fehr and Falk (1999, p. 189), the sense of equity within a firm depends considerably on perceived wage disparity what leads to the conclusion that perceived wage disparity also impacts pay level satisfaction.

Folger and Konovsky (1989, p. 115) narrow the topic of the pay level satisfaction even more by focusing on the satisfaction with pay increase. They discuss the relationship between distributive justice (perceived fairness of one's own wage level) and the satisfaction with a wage increase. Empirical evidence suggests that a high perceived distributive justice significantly increases the satisfaction with wage increase (Folger & Konovsky, 1989, p. 124). Also, Heneman, Greenberger and Fox (2002, p. 69) address the topic of pay increase satisfaction and state that an employee firstly has to compare the increase to other workmates before he can get satisfaction out of the pay raise. This finding suggests that if a worker's wage increase is small compared to the others his satisfaction with the wage increase will be lower. In summary, all these theoretical and empirical findings lead to the presumption that employees are more satisfied with a pay raise if their perception of wage disparity is low, what is illustrated in Figure I. Specifically, we expect the following relationship between perceived wage disparity and satisfaction with wage increase:

Hypothesis 1: *Perceived wage disparity is negatively related to satisfaction with wage increase.*

After having discussed the relationship between perceived wage disparity and satisfaction with wage increase, we examine moderators that could have an influence on this relationship. Firstly, the topic of gender differences is discussed. Many empirical studies show that women have a higher job and income satisfaction than men (Arnold, 2008, p. 46). Sloane and Williams (2000, p. 496) show that there are differentials between women and men in terms of the effects of wage equity on job satisfaction. They show in their study that wage and its related components are less important for women's job satisfaction than for men's job satisfaction. According to this, women get their job satisfaction out of other aspects of work and do not care that much about their wage. Also a much higher positive impact of wage fairness on men's job satisfaction was found compared to the impact on women's job satisfaction (Sloane & Williams, 2000, p. 496). It appears that the wage disparity has a much stronger negative impact on men's satisfaction than on women's satisfaction. Based on these findings, we will analyze the following moderating impact of gender on the relationship between perceived wage disparity and satisfaction with wage increase (illustrated in Figure II):

Hypothesis 2a: *Gender moderates the relationship between perceived wage disparity and satisfaction with wage increase in such a way that perceived wage disparity is more negatively related to satisfaction with wage increase for men than it is for women*

The second moderator we will look at is tenure. Pfeffer and Langton (1993, p. 397) found that possible negative effects of perceived wage disparity on employee's satisfaction are reduced for an employee with longer tenure. Employees who already stayed for a long time with the company are typically older workers. Since they worked for the company for a long time, they are often strongly committed to the firm. That could be a reason why they are not concerned about a high perceived wage disparity, and therefore, the negative influence on their satisfaction is not as high as for employees who just entered the firm. In light of this evidence, we expect the following moderating effect of tenure in the relationship of perceived wage disparity and satisfaction with wage increase (illustrated in Figure III):

Hypothesis 2b: *Tenure moderates the relationship between perceived wage disparity and satisfaction with wage increase in such a way that perceived wage disparity is more negatively related to satisfaction with wage increase for high tenure workers than it is for workers who just entered the firm.*

The wage level represents the third potential moderator. The height of an employee's wage level could have an effect on the strength of the negative relationship between perceived wage disparity and satisfaction with wage increase. Brown (2001, p. 892) found that employees are less satisfied with their wage if they earn less than the average wage within their company. On the other hand, workers who earn more than the average wage within of the firm are more satisfied with their wage. This shows that wage level plays a role in terms of income satisfaction. Another empirical study found that negative impacts of wage disparity on satisfaction are larger for employees who have a lower relative wage (Pfeffer & Langton, 1993, p. 382). Employees who earn less than the average are disadvantaged in an environment with high wage disparity and therefore very dissatisfied, whereas people with a relative high wage level are better off and hence satisfied to belong to the people who receive more money (Pfeffer & Langton, 1993, p. 384). Another empirical study found the relationship between wage level and satisfaction with wage increase. Employees who experienced a wage increase from the perspective of a high current wage have the perception to be paid fairly, and therefore, are also satisfied with the pay raise. In contrast, employees on a low wage level, which they perceive as unfair, are more likely to be dissatisfied with a further increase in wage (Rambo & Pinto, 1989, p. 143). Finally, we expect the following moderating effect of wage level on the correlation between perceived wage disparity and satisfaction with wage increase (illustrated in Figure IV):

Hypothesis 2c: *Wage level moderates the relationship between perceived wage disparity and satisfaction with wage increase in such a way that perceived wage disparity is more negatively related to satisfaction with wage increase for workers with lower wage levels than it is for workers with higher wage levels.*

The last potential moderator stands in high connection to the previous moderator of wage level. It is the satisfaction with wage disparity. Employees who have a low wage level are typically also very dissatisfied with a high perceived wage disparity, while people with a high wage level do not care that much about wage disparity (Pfeffer & Langton, 1993, p. 384). Arnold (2008, p. 62) came to the conclusion that the relationship between satisfaction with wage disparity and general job satisfaction is significantly positive. That means people who are satisfied with the differences in wages are more likely to be satisfied with the general job. If we apply these results to our concept, we come to the expectation that the negative impact of perceived wage disparity on satisfaction with wage increase will be less negative for people who are satisfied with the wage disparity. This leads to our last hypothesis (illustrated in figure V):

Hypothesis 2d: *Satisfaction with wage disparity moderates the relationship between perceived wage disparity and satisfaction with wage increase in such a way that perceived wage disparity is more negatively related to satisfaction with wage increase for workers who are not satisfied with the wage disparity.*

Methods

Procedures and Sample

The hypotheses of this paper were tested with data of the Swiss Human-Relations-Barometer 2008. These data were collected by a telephone survey, which was conducted between April and July 2007. A random sample of telephone numbers drawn from all telephone numbers registered in the German- and French-speaking parts of Switzerland was used (language was controlled in the analyses). The interviews were conducted by interviewers of the ETH Zurich, the University of Zurich and the University of Fribourg who were trained before carrying out the interviews. People were contacted at home, and the interviewers checked whether or not they belonged to the target group. The target group consisted of people employed at least 40 percent of the time and aged between 16 and 65 years. Self-employed people, proprietors of a business, and apprentices have not been interviewed.

The survey yielded data from 1,370 employees. After data cleansing (excluding incomplete data sets) this resulted in 1,336 complete data sets for our analysis. Of the respondents included in the analyzed data sets, 56% were male, 73% lived in the German-speaking part of Switzerland and 63% worked full time. The mean age was 44 years (SD = 10.3 years) and the mean organizational tenure was 10 years (SD = 9.3 years). Nearly half (48%) of the employees included in the sample had a high educational level (college of higher education, university of applied sciences, university degree or equivalent). For the first hypothesis, we used a slightly higher number of 1,351 data sets (due to the exclusion of the moderator variables), which perform almost identical in the presented sample characteristics.

Measures

Perceived wage disparity acts as the independent variable in our empirical research model and was measured with a single item ("How do you assess the difference between the lowest and the highest salary in your company?"). The response options were measured on a 5-point Likert scale ranging from 1 (very small) to 5 (very large).

The dependent variable in the model is *satisfaction with the latest wage increase*. It was measured with one item consisting of the question "How satisfied or dissatisfied do you feel with the amount of your last pay raise?" It was assessed on a five-point Likert scale with values ranging from 1 (very dissatisfied) to 5 (very satisfied).

Moderating variables. The first moderating variable in the model is gender. It was assessed dichotomously (1 = male, 0 = female). Tenure is a second moderating variable which was measured in years. The third moderator in the empirical model is wage level. It consisted of a single item that measured the monthly gross income. The income was coded at six levels: less than 2000 Swiss Francs, 2000-4000 Swiss Francs, 4001-6000 Swiss Francs, 6001-8000 Swiss Francs, 8001-10000 Swiss Francs and more than 10001 Swiss Francs. The last moderating variable is satisfaction with wage disparity. It was measured with the following item: "How satisfied or dissatisfied do you feel with the wage differences between the jobs in your company?" The response options ranged on a 5-point Likert scale from 1 (very dissatisfied) to 5 (very satisfied).

Control variables. It is possible that demographic factors effect the dependent variable of satisfaction with wage increase. Therefore, they were controlled in the empirical analysis. In particular, we controlled for age, educational level, language, grade of employment and firm size. As showed in recent literature and explained in the next paragraph, all these variables tend to be related to general job satisfaction or satisfaction with pay. Since satisfaction with wage increase can be understood as a part of general job satisfaction or satisfaction with pay, we included these control variables in our empirical model.

Research shows that there exists a relationship between age and job satisfaction (Kacmar & Ferris, 1989). Educational level can have an influence on satisfaction with pay as people with higher education tend to have higher expectations regarding their wages. Since higher expectations are usually harder to meet, people with high expectations might show lower satisfaction with pay (Williams, McDaniel & Nguyen, 2006). We further control for language, since the German and the French part of Switzerland differ in culture (Gerber, Wittekind, Grote, Conway & Guest, 2009). We took grade of employment into consideration because Eberhardt and Shani (1984) found that full and part time employees show different levels of overall job satisfaction. As shown in research, job satisfaction and pay satisfaction can also be affected by firm size (Idson, 1990). For example, small companies might have lower financial possibilities to increase salaries than much larger companies.

Age was measured in years. Educational level was assessed dichotomously (1 = high education, 0 = low education),[1] as well as language (1 = German, 0 = French). Also, grade of employment was assessed with a dummy variable (1 = full time, 0 = part time). Company size was measured by two dummies: small and middle companies with 10 to 250 employees (1 = yes, 0 = no) and large companies with more than 250 employees (1 = yes, 0 = no). Companies with less than ten employees were the reference category for this control variable.

Analysis

To test our hypotheses, we performed statistical tests and conducted five regression analyses. First, we tested the direct effect of perceived wage disparity on satisfaction with wage increase (Hypothesis 1) by running an OLS regression analysis. This was conducted with a hierarchical regression where the control variables (age, educational level, language, grade of employment, firm size) were added in a first step, and the independent variable in a second step.

To test the moderating effect of gender, tenure, wage level and satisfaction with wage disparity on the relation between perceived wage disparity and satisfaction with wage increase (hypotheses 2a, 2b, 2c, 2d), we conducted four separate moderated hierarchical regression analyses. For all moderation analyses, we employed the three-step procedure recommended by Baron and Kenny (1986). In the first step, the control variables were entered into the model. Also, the three remaining moderating variables that were not used as a moderator in a particular moderated regression were control variables. In the second step, the independent variable and the moderating variable were entered. In the third and last step, the interaction term

[1] High education: college of higher education, university of applied sciences, university degree or equivalent.

between independent and moderating variable was added. On the basis of this term, we were able to determine whether moderation was present or not. In case the interaction term proofed to be statistically significant, further graphical analyses were necessary. Consistent with Dawson (2013), we z-transformed all control, independent, and moderating variables before generating the interaction terms and running the moderation regressions.

Results

Descriptive Analysis

Table I presents the means, standard deviations and correlations of the measured variables. As can be seen in Table I, perceived wage disparity was negatively and statistically significant correlated to satisfaction with wage increase ($r = -.056$, $p < .05$). A negative and statistically significant correlation was also observed between tenure and satisfaction with wage increase ($r = -.06$, $p < .05$). On the contrary, wage level ($r = .176$, $p < .01$) and satisfaction with wage disparity ($r = .314$, $p < .01$) were positively and significantly correlated to satisfaction with wage increase. Between the fourth moderator, gender, and satisfaction with wage increase, no statistically significant correlation could be found ($r = .032$, $p = .238$). Among the control variables, educational level ($r = .074$, $p < .01$) and the grade of employment ($r = .076$, $p < .01$) were positively and statistically significant correlated to satisfaction with wage increase. All other control variables showed no statistically significant correlation to satisfaction with wage increase.

TABLE I: Descriptive Statistics and Correlations													
Variables	**Mean**	**SD**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
1. Perceived wage disparity	3.75	1.05											
2. Satisfaction with wage increase	3.22	1.17	-.056*										
3. Age	44.27	10.30	-.093**	.053									
4. Educational level	.48	.50	-.005	.074**	-.019								
5. Language	.73	.44	.090**	.053	-.058*	.001							
6. Grade of employment	.63	.48	.068*	.076**	-.083**	.035	-.025						
7. Firm size: small and middle	.10	.92	-.218**	-.011	.059*	-.023	.059*	.059*					
8. Firm size: large	.24	.68	.293**	-.037	-.024	.104**	-.065*	-.065*	-.645**				
9. Gender	.56	.50	-.027	.032	.043	.117**	.054*	.511**	-.035	.092**			
10. Tenure	10.37	9.27	-.003	-.060*	.518**	-.082**	-.126**	.068*	-.093**	.122**	.101**		
11. Wage level	3.97	1.17	.052	.176**	.217**	.476**	-.003	.074**	-.089**	.151**	.236**	.161**	
12. Satisfaction with wage disparity	3.20	.98	-.253**	.314**	.073**	.052	.041	.013	.091**	-.127**	.095**	.014	.152**

N = 1336

* p < .05; ** p < .01; *** p < .001

Explanations

4. Educational level: 1 = high education, 0 = low education

5. Language: 1 = German, 0 = French

6. Grade of employment: 1 = full time, 0 = part time

9. Gender: 1 = male, 0 = female

Test of Hypotheses: Direct effect

Hypothesis 1 predicts a negative relationship between perceived wage disparity and satisfaction with wage increase. Results for the direct effect of perceived wage disparity on satisfaction with wage increase are shown in Table II.

TABLE II: Direct Regression Analysis for Perceived Wage Disparity and Satisfaction with Wage Increase (without Moderators)

	Satisfaction with wage increase	
Variables	β Step 1	β Step 2
Controls		
	-.040	-.044
Educational level	.077**	.075**
Language	.053	.060*
Grade of employment	.083**	.084**
Firm size: small and middle	-.063	-.066
Firm size: large	-.099**	-.082*
Predictors		
Perceived wage disparity		-.065*
Adjusted R^2	.017	.020
ΔR^2 Change		.004
ΔF	4.895***	5.255*

N = 13512
* p < .05; ** p < .01; *** p < .001
Standardized coefficients are reported.

As the results in table II (step 2) indicate, the overall model is able to predict 2% of the total variance in satisfaction with wage increase (adjusted $R^2 = .020$). The F-statistic suggests that the increase in the variance explained is statistically significant ($\Delta R^2 = .004$, $\Delta F = 5.255$, $p < .05$). Further, perceived wage disparity shows a negative and statistically significant impact on satisfaction with wage increase ($\beta = -.065$, $p < .05$). Also, some of the control variables significantly predict satisfaction with wage increase. Hence, these empirical results support Hypothesis 1.

[2] Since we want to test the direct effect of perceived wage disparity on satisfaction with wage increase without any moderators, a slightly higher N arises in this direct regression analysis (table II) after data cleansing (excluding incomplete data sets) compared to the moderated regression analyses (tables III, IV, V, VI).

Test of Hypotheses: Moderating effects

Hypothesis 2a states that gender moderates the relationship between perceived wage disparity and satisfaction with wage increase (such that perceived wage disparity is more negatively related to satisfaction with wage increase for men than it is for women). Table III shows the results of the moderated hierarchical regression for perceived wage disparity and satisfaction with wage increase with the moderator gender.

TABLE III: Moderated Hierarchical Regression for Perceived Wage Disparity and Satisfaction with Wage Increase (Moderator: Gender)

	Satisfaction with wage increase		
Variables	β Step 1	β Step 2	β Step 3
Controls			
Age	-.075*	-.073*	-.074*
Educational level	-.021	-.020	-.021
Language	.031	.037	.037
Grade of employment	.065*	.104**	.106***
Firm size: small and middle	-.063	-.061	-.058
Firm size: large	-.069*	-.068	-.066
Tenure	-.052	-.049	-.048
Wage level	.167***	.181***	.182***
Satisfaction with wage disparity	.291***	.294***	.290***
Predictors			
Perceived wage disparity		-.004	-.058
Gender		-.079*	-.251**
Moderation			
Perceived wage disparity*Gender			.184
Adjusted R^2	.130	.133	.135
ΔR^2 Change		.004	.002
ΔF	23.197***	3.302*	3.540

N = 1336
* p < .05; ** p < .01; *** p < .001
Standardized coefficients are reported.

As shown in the third column of table III (step 3), the overall model explains 13.5% of the total variance of satisfaction with wage increase (adjusted R^2 = .135). The F-statistic suggests that the increase in the variance explained is not statistically significant on the 5%-level, but on the 10%-level (ΔR^2 = .002, ΔF = 3.540, p = .060). Further, gender has a statistically significant direct impact on satisfaction with wage increase (β = -.251, p < .01). Moreover, the interaction term between perceived wage disparity and gender is not statistically significant on the 5%-level, but on the 10%-level (β = .184, p = .060). Also, some of the control variables have a statistically significant impact on satisfaction with wage increase. Since the interaction term between perceived wage disparity and gender is statistically significant on level of 10%, there is evidence that gender moderates the relationship between perceived wage disparity and satisfaction with wage increase. Accordingly, these empirical results provide support for Hypothesis 2a. In order to gain a deeper understanding of the interaction term, a graphical analysis is necessary. Figure VI shows the moderating effect of gender on the relationship between perceived wage disparity and satisfaction with wage increase.

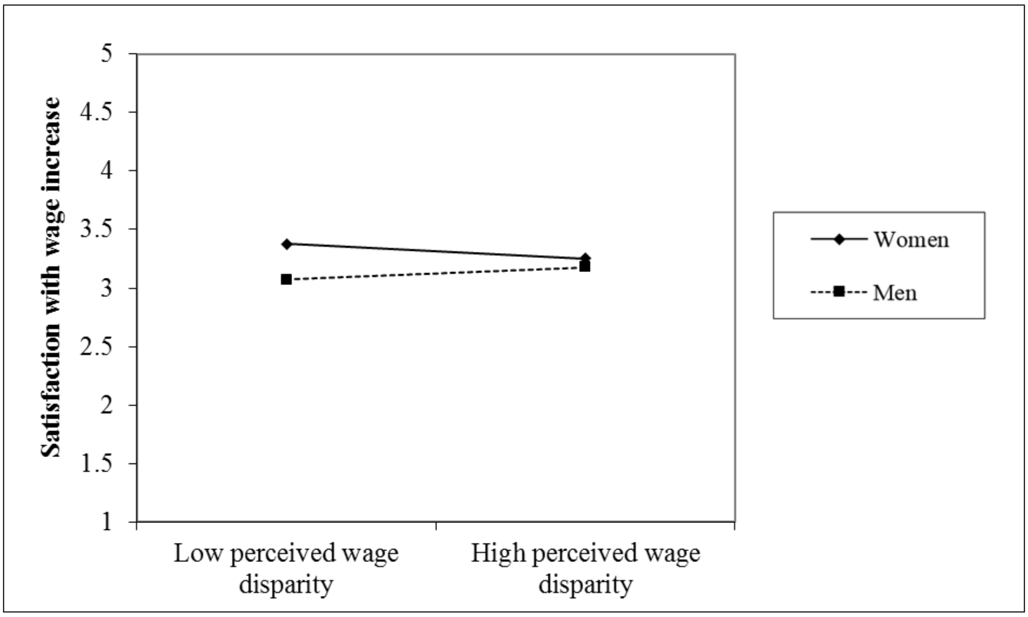

Figure VI: Moderating Effect of Gender on the Relationship between Perceived Wage Disparity and Satisfaction with Wage Increase

As can be seen in Figure VI, gender changes the direction of the relationship between perceived wage disparity and satisfaction with wage increase. For women, satisfaction with wage increase is slightly higher if they perceive wage disparity as low than if they perceive wage disparity as high. The reverse holds true for men. Men are more satisfied with wage increase if they perceive wage disparity as high than if they perceive wage disparity as low.

According to Hypothesis 2b, tenure moderates the relationship between perceived wage disparity and satisfaction with wage increase (such that perceived wage disparity is more negatively related to satisfaction with wage increase for younger workers than it is for older workers). Table IV shows the empirical results of the moderated hierarchical regression for perceived wage disparity and satisfaction with wage increase with tenure as moderator.

TABLE IV: Moderated Hierarchical Regression for Perceived Wage Disparity and Satisfaction with Wage Increase (Moderator: Tenure)

	Satisfaction with wage increase		
Variables	β Step 1	β Step 2	β Step 3
Controls			
Age	-.097***	-.073*	-.074*
Educational level	-.014	-.020	-.018
Language	.041	.037	.038
Grade of employment	.101**	.104**	.106**
Firm size: small and middle	-.058	-.061	-.058
Firm size: large	-.073*	-.068	-.066
Gender	-.081**	-.079*	-.080*
Wage level	.176***	.181***	.180***
Satisfaction with wage disparity	.296***	.294***	.293***
Predictors			
Perceived wage disparity		-.004	-.034
Tenure		-.049	-.138
Moderation			
Perceived wage disparity* Tenure			.098
Adjusted R^2	.133	.133	.133
ΔR^2 Change		.002	.001
ΔF	23.725***	1.249	1.079

N = 1336
* p < .05; ** p < .01; *** p < .001
Standardized coefficients are reported.

As the results in Table IV (step 3) indicate, the overall model of the third step is not able to explain more percent of the total variance in satisfaction with wage increase than the second step (R^2 = .133, ΔR^2 = .001). Tenure as a predictor has no significant direct impact on satisfaction with wage increase (β = -.138, p = .131), and the interaction term between perceived wage disparity and tenure is also not statistically significant (β = .098, p = .299). Some control variables show statistically significant effects on satisfaction with wage increase. There is no evidence for a moderating effect of tenure on the relationship between perceived wage disparity and satisfaction with wage increase and thus no support for Hypothesis 2b.

The moderating effect of wage level on the relationship between perceived wage disparity and satisfaction with wage increase is addressed in Hypothesis 2c (such that perceived wage disparity is more negatively related to satisfaction with wage increase for workers with lower wage levels than it is for workers with higher wage levels). Table V shows the results of the moderated hierarchical regression for perceived wage disparity and satisfaction with wage increase with the moderator wage level.

TABLE V: Moderated Hierarchical Regression for Perceived Wage Disparity and Satisfaction with Wage Increase (Moderator: Wage Level)

	Satisfaction with wage increase		
Variables	β Step 1	β Step 2	β Step 3
Controls			
Age	-.042	-.073*	-.073*
Educational level	.060*	-.020	-.020
Language	.039	.037	.038
Grade of employment	.097**	.104***	.105***
Firm size: small and middle	-.068*	-.061	-.059
Firm size: large	-.055	-.061*	-.068
Tenure	-.034	-.049	-.049
Gender	-.048	-.079*	-.080*
Satisfaction with wage disparity	.315***	.294***	.293***
Predictors			
Perceived wage disparity		.012	-.088
Wage level		.180***	.092
Moderation			
Perceived wage Disparity*Wage level			.128
Adjusted R^2	.112	.133	.133
ΔR^2 Change		.022	.001
ΔF	19.778***	16.912***	.994

N = 1336
* p < .05; ** p < .01; *** p < .001
Standardized coefficients are reported

As shown in Table V (step 3), the model explains no additional percent of the variance in satisfaction with wage increase (R^2 = .133, ΔR^2 = .001). The third step further indicates that wage level as an independent variable shows no statistically significant direct impact on satisfaction with wage increase (β = .092, p = .326). Also, the interaction term between perceived wage disparity and wage level does not have a statistically significant effect on satisfaction with wage increase (β = .128, p = .319). As in the previous regressions, some of the control variables are able to statistically significantly predict satisfaction with wage increase. Evidence for a moderating impact of wage level on the relationship between perceived wage disparity and satisfaction with wage increase is not existent. Consequently, these empirical findings provide no support for Hypothesis 2c.

Hypothesis 2d states that satisfaction with wage disparity moderates the relationship between perceived wage disparity and satisfaction with wage increase (such that perceived wage disparity is more negatively related to satisfaction with wage increase for workers who are not satisfied with the wage disparity). The results of the moderated hierarchical regression for perceived wage disparity and satisfaction with wage increase with the moderator satisfaction with wage disparity can be found in Table VI.

TABLE VI: Moderated Hierarchical Regression for Perceived Wage Disparity and Satisfaction with Wage Increase (Moderator: Satisfaction with Wage Disparity)

	Satisfaction with wage increase		
Variables	β Step 1	β Step 2	β Step 3
Controls			
Age	-.060	-.073*	-.073*
Educational level	-.025	-.020	-.020
Language	.045	.037	.037
Grade of employment	.104***	.104***	.104***
Firm size: small and middle	-.058	-.061	-.061
Firm size: large	-.112**	-.068*	-.068*
Tenure	-.055	-.049	-.049
Gender	-.057	-.079**	-.079**
Wage Level	.227***	.181***	.290***
Predictors			
Perceived wage disparity		-.075**	-.007
Satisfaction with wage disparity		.295***	.290***
Moderation			
Perceived wage Disparity*Satisfaction with Wage disparity			.005
Adjusted R^2	.052	.133	.133
ΔR^2 Change		.082	.000
ΔF	9.055***	63.465***	.002

N = 1336
* p < .05; ** p < .01; *** p < .001
Standardized coefficients are reported

According to Table VI, the third model (step 3) of the moderated regression above is not able to explain further percent of the total variance in satisfaction with wage increase

($R^2 = .133$, $\Delta R^2 = .000$). Although satisfaction with wage disparity positively and statistically significant impacts satisfaction with wage increase ($\beta = .290$, $p < .001$), the interaction term between perceived wage disparity and satisfaction with wage disparity does not show a statistically significant effect on satisfaction with wage increase ($\beta = .005$, $p = .967$). Control variables show standardized coefficients as expected. There is no evidence for a moderating effect of satisfaction with wage disparity on the relationship between perceived wage disparity and satisfaction with wage increase. Thus, these empirical findings provide no support for Hypothesis 2d.

Discussion

In this paper, we examined if perceived wage disparity (i.e., disparity between the lowest and the highest income) within a company does have an impact on satisfaction with wage increase. Moreover, we analyzed if gender, tenure, wage level or satisfaction with wage disparity as potential moderators have an impact on the relationship between perceived wage disparity and satisfaction with wage. Our study showed that a higher perceived wage disparity leads to a decrease in satisfaction with wage increase. Moreover, the results show that gender changes the direction of the relationship between perceived wage disparity and satisfaction with wage increase.

We found that a high perceived disparity between the lowest and the highest income within the company leads to a lower satisfaction with wage increase, whereas a small perceived wage disparity leads to a higher satisfaction with wage increase. Thereby, our findings extend the results of Dreher (1981) and Till and Karren (2011) who found a relationship between perceived wage disparity and pay level satisfaction but did not look at the impact of perceived wage disparity on satisfaction with pay raise. Furthermore, we found support for the proposition of Heneman et al. (2002), that the sense of inequality to other employees inside the organization has an effect on satisfaction with pay increase. The authors suggest that an employee firstly has to compare the increase to other workmates before she or he can get satisfaction out of the pay raise. If wage disparity is perceived to be higher, the relative change in the sense of inequality of employees within the firm is smaller with a pay increase of a certain amount. Therefore, we conclude that a wage increase of a certain amount leads to a smaller improvement of the situation of inequality between employees for employees with a higher perceived wage disparity. This makes employees with a high perceived wage disparity less satisfied with the pay increase. Thereby, our results are also in line with the findings of Folger and Konovsky (1989) who observed that employees are more satisfied with a wage increase if they perceive the distribution of wages as fair.

According to our findings, we can also conclude that for women, satisfaction with wage increase is slightly higher if they perceive wage disparity as low than if they perceive wage disparity as high. The reverse holds true for men. They are more satisfied with wage increase if they perceive wage disparity as high than if they perceive wage disparity as low. This result slightly differs from several previous studies. Those studies showed that women are generally more satisfied with their job and wage than men. Sloane and Williams (2000, p. 496) found that wage and its related components are less important for women's job satisfaction than for men's, and that men care more about wage fairness than women. Thus, men not only care more about their wage, but also about wage disparity because perceived wage disparity is strongly linked to wage fairness. As our results show, women also care about wage disparity. They are less satisfied with a wage increase if they perceive wage disparity as high. Women may in general be paid less than man, what could explain that the negative impact of high differences in wages on satisfaction with wage increase is higher for women than for men. This might explain our results that gender changes the direction of the relationship between perceived wage disparity and satisfaction with wage increase.

Contrary to our hypotheses, tenure, wage level, and satisfaction with wage disparity do not influence the relationship between perceived wage disparity and satisfaction with wage increase. Therefore, the strength of the decreasing impact of a higher perceived wage disparity on satisfaction with wage increase remains constant with differences in tenure, wage level and satisfaction with wage disparity.

Theoretical and Practical Implications

Our study has theoretical as well as practical implications. Many existing theories and studies only looked at factors impacting general job satisfaction. This study is one of the very few that focus on one specific part of general job satisfaction: satisfaction with wage increase. All findings related to the direct relationship, as well as to the potential moderating effects, contribute to theory as they are new and have not been made before. Although not the object of the main analysis, satisfaction with wage disparity showed throughout highly significant and positive values when acting as an independent variable rather than a moderator. The higher the satisfaction with wage disparity, the higher the satisfaction with wage increase. Further, wage level also showed a highly significant and positive impact on satisfaction with wage increase when acting as a direct predictor. The higher the wage level, the higher the satisfaction with wage increase. Also, these findings contribute to the existing theory and research as they reveal a new field of potential future research.

The results of this study not only have implications for theory, but also for practice. We propose some practical implications that will help companies in their strategic decisions around the topic of wage increase. Thereby, the findings are relevant and valid for companies based in Switzerland. Our findings suggest that companies with employees who perceive the wage disparity as high may have problems to make the employees satisfied with a wage increase. Workers with a high perceived wage disparity may not be as satisfied with a wage increase as workers with a low perceived wage disparity. A company with a culture of many promotions and wage increases needs to be aware of the negative impact of the perceived wage disparity on satisfaction with wage increase (despite the fact that the effect is rather small). Such a company should try to reduce perceived wage disparity. Otherwise, the positive effect, which a wage increase should have, disappears due to the high perceived wage disparity. Especially for companies that actually have a low wage disparity, wage transparency could be an opportunity to reduce employees' perception of wage disparity within the company.

Further, companies should know that the negative effect of perceived wage disparity on satisfaction with wage increase changes with the employee's gender, but not with his or her tenure, wage level, or satisfaction with wage disparity. As mentioned before, we found variables that have a higher impact on satisfaction with wage increase than the perceived wage disparity has, namely satisfaction with wage disparity and wage level. These direct effects can be very interesting for practical human resource professionals. The more satisfied an employee is with wage disparity, or the higher his wage level, the more he or she is satisfied with a wage increase. When making decisions about wage increases companies should be aware that these variables have a great influence on the satisfaction with wage increase.

Limitations and Future Research

This study has certain limitations which should be considered in future research. Firstly, the results of this study are only valid in the German and French speaking parts of Switzerland. As the interviews were conducted in these areas, we cannot make any statement about the effects in other countries. Future studies should analyze whether the effects occur in other regions of the world. It is possible that there exist stronger effects in countries where the perceived wage disparity is higher than in Switzerland.

Secondly, the empirical results and findings based on data of a cross sectional study, which was conducted at a single point in time. Thus, the independent and dependent variables were measured at the same time. That limits the possibility to explicitly determine causal relationships (Rindfleisch, Malter, Ganesan & Moorman, 2008, S. 262). We cannot exclude that the effect is not in the direction of wage disparity on satisfaction with wage increase but rather in the other direction. However, for reasons of logic and due to the literature analysis the discussed relationships and the presented effect directions seem sensible. To gain a deeper understanding of the causal relationships a longitudinal research design is necessary.

Thirdly, the data for the independent and dependent variables were not only collected at the same time, but also with the same source. This circumstance may raise the issue of a common method bias. Using the same method for collecting all data can induce systematic error variances of all variables (Podsakoff, MacKenzie, Lee & Podsakoff, 2003, p. 879). A possibility for future research to circumvent the problem is to take the actual wage disparity from data of the company and the other variables from surveys among the employees.

Fourthly, the empirical results showed that the direct effect of wage disparity on satisfaction with wage increase is rather small. However, satisfaction with wage disparity (a control variable) showed highly significant results. Therefore, it would be interesting to analyze the relationship between satisfaction with wage disparity and satisfaction with wage increase in more detail and with possible moderation effects. Also, the relationship between wage level and satisfaction with wage increase deserves more attention in future research. Future studies could also consider other variables (apart from perceived wage disparity, satisfaction with wage disparity or wage level) which could have an influence on satisfaction with wage increase. All in all, there exist some limitations, but also a wide field where future research can draw on the theoretical insights.

Conclusions

The study has provided results that contribute to the still rather small research field around the topic of satisfaction with wage increase. We found that perceived wage disparity has a small negative impact on satisfaction with wage increase, and that this direct relationship is moderated by gender, but not by tenure, wage level, and satisfaction with wage disparity. Furthermore, we came to the conclusion that other variables influence satisfaction with wage increase very strongly, namely, satisfaction with wage disparity and wage level. Based on these findings, we suggest that companies take these relationships into consideration when making decisions about wage increases. Future research should continue to examine the satisfaction with wage increase in order to increase the understanding of its impact factors.

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PERCEIVED WAGE DISPARITY AND JOB SATISFACTION: THE MODERATING EFFECT OF CAREER ORIENTATION

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Abstract: The purpose of this study was to examine if career orientation moderates the relationship between perceived wage disparity and job satisfaction. Our motivation was to elucidate the controversy about the effect of perceived wage disparity on job satisfaction. On one hand, the behavioral view predicts a negative effect. On the other hand, the economic view predicts a positive effect. We argued that employees who want to move upwards would perceive their career as a tournament according to Lazear and Rosen's (1981) tournament theory. For these employees, the relationship between perceived wage disparity and job satisfaction should be positive. The empirical analysis, which uses cross-sectional data of 1331 employees working in Switzerland, showed that the effect of perceived wage disparity on job satisfaction is negative, thus supporting the behavioral view. However, the moderating effect of career orientation on the relationship between perceived wage disparity and job satisfaction is not statistically significant. Consequently, the controversy continues.

Keywords: perceived wage disparity, job satisfaction, career orientations

Introduction

"As long as a woman can look ten years younger than her daughter, she is perfectly satisfied." Oscar Wilde (*The Picture of Dorian Gray*, 1890).

The prospect theory of Tversky and Kahneman (1992, p. 303) sheds light on the phenomenon of the foregoing quote by stating that people use comparisons to evaluate outcomes. When looking at a single firm, the larger the difference in the employees' wages, the more potential exists to compare each other. The difference in these wages measured by the tenth percentile of wage distribution compared to the ninetieth percentile of wage distribution is an objective measure for the wage disparity of the particular firm (Juhn, Murphy, & Pierce, 1993, p. 411). However, the foregoing quote exhibits that individuals do not only concentrate on objective measures to evaluate outcomes, but also on their own subjective perceptions. Perceived wage disparity is an employee's perception about the wage disparity on the same hierarchical level as well as upwards, respectively downwards the hierarchical ladder (Brown, 2001, p. 879). This definition of perceived wage disparity implies no longer an absolute, but a relative perspective as different wages are compared to each other. In an individual's outcome evaluation, the outcome level relative to the chosen reference point accounts for a perceived loss or a perceived gain (Tversky & Kahneman, 1992, p. 303).

A large controversy exists regarding the effect of perceived wage disparity on job satisfaction. This controversy builds upon two different points of view: the behavioral view and the economic view. The behavioral view indicates that smaller wage disparity induces cooperation between individuals (Henderson & Fredrickson, 2001, p. 98), work motivation (Leete, 2000, p. 423), as well as cohesiveness (Levine, 1991, pp. 237, 248), and hence, results in increased productivity (Siegel & Hambrick, 2005, p. 259). Adams' equity theory (1965, p. 285) provides reasons for these correlations, stating that inputs and outputs are intercorrelated. Because of the normative expectations of fair correlations between inputs and outputs, large wage disparity raises concerns about inequity. In addition, Fehr and Schmidt (1999, p. 821) show that individuals prefer fairness due to their inequality aversion. Therefore, perceived wage disparity has a negative impact on job satisfaction in the behavioral view (Brown, 2001, p. 892; Martin, 1982, p. 120; Oldham, Kulik, Ambrose, Stepina, & Brand, 1986, p. 28; Pfeffer & Langton, 1993, pp. 397-399).

The economic view predicts exactly the opposite: larger wage disparity induces higher job satisfaction. An increasing number of research papers show that as monitoring of employees becomes more difficult, wage disparity can be used as an incentive to gain additional effort from the employees (Backes-Gellner & Pull, 2013, pp. 375-377; Henderson & Fredrickson, 2001, pp. 98-99). According to the tournament theory, large wage disparity leads to higher performance as a result of the incentive effect (Lazear and Rosen, 1981, pp. 842, 863). In line with these findings, researchers reveal that job satisfaction increases with larger wage disparity because of Lazear and Rosen's (1981) tournament-like incentives and the resulting motivation (Clark, Kristensen, & Westergård-Nielsen, 2009, p. 431). Thus, the behavioral and the economic views are both supported by empirical evidence that contradict each other. This leads to the puzzling consequence that in literature, perceived wage disparity has either a negative or a positive relationship with job satisfaction.

Various researchers indicate an effect of job satisfaction on turnover intention (Card, Mas, Moretti, & Saez, 2010, p. 3; Cotton & Tuttle, 1986, pp. 57-58, 63; Summers & Hendrix, 1991, pp. 152, 154), performance (Hoath, Schneider, & Starr, 1998, p. 338; Saari & Judge, 2004, p. 398), company climate and productivity (Patterson, Warr, & West, 2004, p. 193). Thus, existing literature shows that job satisfaction has a broad practical and financial relevance. Therefore, we want to explain and overcome the controversy about the effect of perceived wage disparity on job satisfaction. To do this, we include career orientations as moderators. Gerber, Wittekind, Grote, and Staffelbach (2009) define career orientations in the following way: "[…] career orientations reflect an individual's preferences regarding particular career-related opportunities, circumstances and career types" (p. 304).

In this study, we examine career orientations as moderators of the relationship between perceived wage disparity and job satisfaction. More specifically, we attempt to make the following two contributions to existing literature. First, we theoretically examine the relationship between perceived wage disparity and job satisfaction. Out of the theoretical analysis, we predict a negative relationship between perceived wage disparity and job satisfaction. Second, we include the moderators of two career orientations with a high score in the advancement dimension. Thus, we examine whether employees with an independent or a promotion-focused career orientation experience a positive effect of perceived wage disparity on job satisfaction. For the empirical analysis, we use representative data of 1331 employees working in Switzerland (Grote & Staffelbach, 2008).

Theory

The controversy about the effect of perceived wage disparity on job satisfaction

Prospect theory (Kahneman & Tversky, 1979, pp. 277-280; Tversky & Kahneman, 1992, p. 303) states that individuals use a reference point to evaluate outcomes. The reference point distinguishes between a perceived loss or a perceived gain (Tversky & Kahneman, 1992, p. 303). To evaluate wages, individuals compare their wage with the wages of their pay referents (Brown, 2001, pp. 879-880). In our study, the pay referents within the organization are of interest, because we examine perceived wage disparity within a firm. An employee takes pay referents on the vertical as well as on the horizontal level into account (Deckop, 1992, pp. 119-120). We use the simultaneous consideration of the pay referents on the firm's vertical and the horizontal levels as the employees' perception of wage disparity within their firm. The individual weighting of the wages of vertical as well as of horizontal pay referents leads to an individual reference wage for every employee. This reference wage is a reference point to evaluate the own wage (Deckop, 1992, pp. 119-121).

Existing literature disagrees about how individuals interpret the outcome of their wage comparisons with their pay referents. This issue is represented by the controversy between the behavioral and the economic views about the relationship between perceived wage disparity and job satisfaction. On one hand, in the behavioral view, several studies provide empirical evidence for a negative relationship between wage disparity and job satisfaction (Pfeffer & Langton, 1993, p. 397; Card et al., 2011, pp. 24-28) or happiness (Luttmer, 2005, pp. 989-990). According to the equity theory (Adams, 1965, pp. 280-283), individuals compare their own output-input-ratios to those of other individuals. If these ratios are equal, equity exists. Fehr and Schmidt (1999, p. 821) show that individuals prefer fairness due to their inequality aversion, which is why an individual does not strictly act as a homo oeconomicus. Further, individuals dislike disadvantageous inequality, and also advantageous inequality. Fehr and Schmidt's (1999) theory about fairness implies that employees paid below their reference point feel dissatisfaction, whereas employees paid above feel guilt about the perceived wage disparity (Deckop, 1992, p. 116). Further, a strong positive relationship between fairness and job satisfaction exists (Diekmann, Barsness & Sondak, 2004, p. 245). Hence, equity theory and the theory of inequality aversion explain why the relationship between perceived wage disparity and job satisfaction is negative in the behavioral view.

On the other hand, in the economic view, an increasing number of studies reveal a positive relationship between perceived wage disparity and job satisfaction (Clark et al., 2009, p. 445) or job performance (Backes-Gellner & Pull, 2013, pp. 375-377; Henderson & Fredrickson, 2001, pp. 110-111). As Lazear and Rosen (1981, pp. 844-847) explain in their tournament theory, an individual's motivational level raises as soon as he or she encounters an adequate incentive. For individuals who experience their careers as a tournament, perceived wage disparity acts as an incentive. These individuals want to achieve the same wage level as their respective competitors. The larger the perceived wage disparity, the larger is the incentive and the motivational level. Motivation and job satisfaction correlate highly positive (Lawler, 1969, pp. 432-434; Tella, Ayeni, & Popoola, 2007, p. 5). Subsequently, higher wage disparity results in higher job satisfaction according to the economic view.

We attempt to combine the two views. In our analyses, we examine whether the direct effect of perceived wage disparity is negative according to the explanations of the equity theory (Adams, 1965) and the theory of fairness (Fehr & Schmidt, 1999). In contrast for ambitious individuals, we examine if the arguments of the tournament theory (Lazear & Rosen, 1981) hold true. Hence, we examine if the effect of perceived wage disparity on job satisfaction is positive for individuals who want to move hierarchically upwards,.

The effect of career orientation on the relationship between perceived wage disparity and job satisfaction

The different weighting of general career values and attitudes such as preferences of self-determination, mobility, advancement, organizational support, and security leads to different types of career orientation (Tschopp, Grote, & Gerber, 2013). In this paper we use the conceptualization of Gerber, Wittekind, Grote, and Staffelbach (2009) that distinguishes between four types of career orientation, namely the independent-, the promotion-focused, the loyalty-focused, and the disengaged career orientation (Gerber et al., 2009, p. 313). As shown in Table 1, the four types of career orientation are differentiated according to the following three dimensions: boundaryless dimension (short-term employment / employability), protean dimension (self-determined career management versus organizational career management) and advancement dimension (upward promotion / importance of career success versus lateral advancement / no importance of career) (Tschopp et al., 2013). This approach of differentiating between four career orientations showed validity in the European context (Gerber et al., 2009, p. 795).

Table I: Types of career orientation (Gerber et al., 2009, pp. 304-314.; Tschopp et al., 2013).

	Boundaryless dimension	Protean dimension	Advancement dimension
Independent career orientation	High	High	High
Loyalty-focused career orientation	Low	Low	Low
Promotion-focused career orientation	Low	High	High
Disengaged career orientation	High	High	Low

Based on the particular importance rating of the three dimensions, individuals can be assorted to one of the four types of career orientation (Tschopp et al., 2013). An employee who belongs to the independent career type does not expect organizational help in his or her career expectation, but expects upward mobility. Furthermore, work is an important part in his or her life. Loyalty-focused employees are very committed to their peers. Additionally, job security is of high value to them. In contrast to the independent career orientation type, upward mobility is not important for loyalty-focused individuals (Gerber et al., 2009, pp. 314-315). Promotion-focused individuals as well as loyalty-focused individuals value the length of the work relationship with their employer. But in contrast to the loyalty-focused career type, promotion-focused individuals expect the possibility to move upwards and thus, expect some help from their employers regarding their career management (Tschopp et al., 2013). The disengaged career orientation is similarly characterized as the independent career orientation. In contrast to the independent career orientation, disengaged career-orientated individuals do not value their work and job as important parts of their lives (Gerber et al., 2009, p. 306).

The advancement dimension is the key dimension for our research. The advancement dimension distinguishes between career orientations that value upward mobility highly, and career orientations that do not value the chance of career success highly (Tschopp et al., 2013). Hence, the advancement dimension distinguishes between individuals who want to move upwards and earn higher wages, and individuals who do not have the desire to move upwards. Both, the independent and promotion-focused career types assess a high importance to the advancement dimension. Correspondingly, the independent and the promotion-focused career types want to hierarchically move upwards in their careers. This career structure is consistent with the rank-ordered tournament as defined by Lazear and Rosen (1981, pp. 844-850).

The literature differs between traditional career paths and new career paths. The traditional career path is characterized by remaining at the same employer, also if an employee moves upwards. The new career path is characterized by frequently changing the employer (Sullivan, 1999, pp. 457-458; Gerber et al., 2009, p. 303). In the conceptualization of Gerber et al. (2009), this difference is represented in the boundaryless dimension. The only difference between the promotion-focused and the independent career orientation is the value of the boundaryless dimension. In contrast to employees with a promotion-focused career type, employees with an independent career type are willing to change their employer in order to move upwards (Tschopp et al., 2013). Hence, independent career types are interested in a high external visibility of their performance (Casas-Arce, 2010, pp. 668-672). Promotion-focused career types value the internal visibility of their performance stronger. Irrespective of the internal or external visibility of the performance, we argue that for independent as well as promotion-focused career types, it is important to over-perform their peers to get a job at a hierarchically higher position (Casas-Arce, 2010, pp. 669-671).

Based on the assumptions of the tournament theory, we expect individuals with high values in the advancement dimension to perceive their career as a rank-ordered tournament. For employees with independent or a promotion-focused career types, the possibility of earning more than other peer employees is perceived as incentive. Thus, we use the independent as well as the promotion-focused career types as moderators, as it is illustrated in Figure I. Further, we expect that the independent as well as the promotion-focused career orientations influence the relationship between perceived wage disparity and job satisfaction, in such a way that for both career orientations the relationship between perceived wage disparity and job satisfaction is positive.

Hypothesis 1: *The independent career orientation moderates the relationship between perceived wage disparity and job satisfaction, in such a way that for employees with an independent career orientation, the relationship between perceived wage disparity and job satisfaction is positive.*

Hypothesis 2: *The promotion-focused career orientation moderates the relationship between perceived wage disparity and job satisfaction, in such a way that for employees with a promotion-focused career orientation the relationship between perceived wage disparity and job satisfaction is positive.*

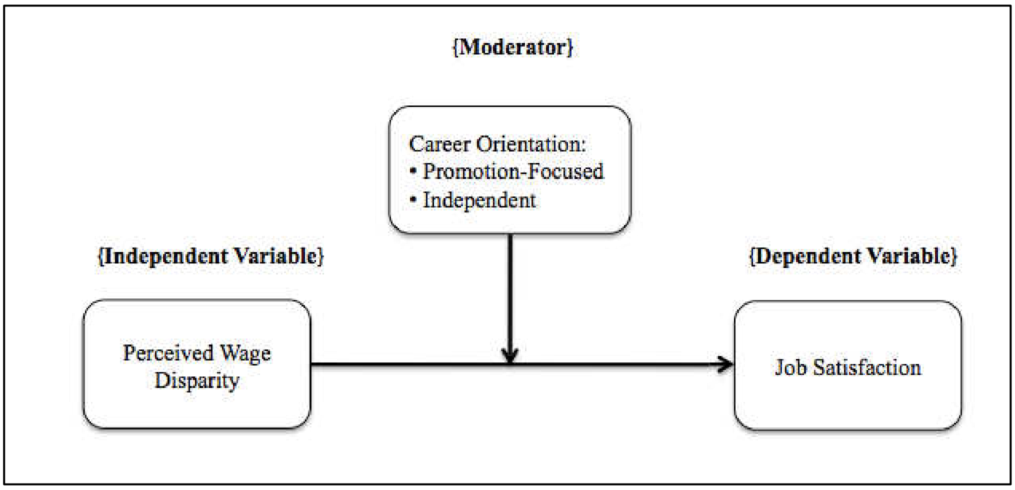

Figure I: Illustration of the moderator analysis

Method

Procedure

The cross-sectional data used to test our hypotheses was taken from the Swiss Human-Relations-Barometer 2008 (Grote & Staffelbach, 2008, p. 7). For collecting the data, CATI between April and July 2007 were conducted. The representative sample was based on individuals' home telephone numbers registered in the German- and French-speaking parts of Switzerland, and extracted randomly from the LINK institute for public opinion polls in 2007. All these individuals were employed working in Switzerland (Grote & Staffelbach, 2008, p. 7). Thirty interviewers, who were mainly economics and psychology students, took part in an extensive preparatory training before carrying out the interviews (Gerber et al., 2009, p. 308). People were contacted at home and were able to answer the questions either in German or French (Grote & Staffelbach, 2008).

Sample

The baseline sample was made up of 1,370 employees in Switzerland. Most (73%) of the participants came from the German-speaking part, while 27% of the participants came from the French-speaking part. Only employees between 16 and 65 years were selected (Grote & Staffelbach, 2008, pp. 7, 20-21). After excluding the incomplete data from the baseline sample, we used a remaining sample of 1,331 employees. The mean age of these employees was 44.28 years (SD = 10.29 years). All surveyed participants had a dependent and paid employment and were employed at least 40% of the time (Grote & Staffelbach, 2008, p. 21). Less than half (44%) of the participants were female and 56% of the participants were male. Few (10%) employees earned between 0 and 4'000 CHF, 62% of the employees earned between 4'001 and 8'000 CHF, and 28% of the employees earned a wage higher than 8'001 CHF per month (based on a 100% contract of employment). Very few (5%) employees finished grade school, 42% finished apprenticeship, 5% finished high school, 17% finished college, 14% finished professional training college, and 17% had a university or doctoral degree. The participants' average tenure was 10.38 years (SD = 9.27).

Measures

Job satisfaction. To test our hypotheses, two different measures of job satisfaction were used: general job satisfaction and progressive job satisfaction. General job satisfaction was measured with a single item ("How satisfied are you with your job?"). The scale of response options ranged from 1 (not at all satisfied) to 10 (extremely satisfied).

This approach of measuring general job satisfaction has been proven to be reliable, valid and comparable to scale measures (Wanous & Hudy, 2001, pp. 365-369; Wanous, Reichers, & Hudy, 1997, pp. 248-250). Progressive job satisfaction was measured according to Bruggemann (1974), who differentiated between five forms of satisfaction. We took the progressive satisfaction, which is distinctive for its advancement dimension. Bruggemann's (1974) progressive satisfaction was measured by one item ("I am really satisfied with my work, especially because I can make progress there.") and is a dichotomous variable, coded with 0 = "no" and 1 = "yes".

Perceived wage disparity and career orientation were measured in the same way in both analyses. Thus, we extended our two hypotheses to the following:

Hypothesis 1a: *The independent career orientation moderates the relationship between perceived wage disparity and general job satisfaction, in such a way that for employees with an independent career orientation the relationship between perceived wage disparity and general job satisfaction is positive.*

Hypothesis 1b: *The independent career orientation moderates the relationship between perceived wage disparity and progressive job satisfaction according to Bruggemann (1974), in such a way that for employees with an independent career orientation the relationship between perceived wage disparity and progressive job satisfaction is positive.*

Hypothesis 2a: *The promotion-focused career orientation moderates the relationship between perceived wage disparity and general job satisfaction, in such a way that for employees with a promotion-focused career orientation, the relationship between perceived wage disparity and general job satisfaction is positive.*

Hypothesis 2b: *The promotion-focused career orientation moderates the relationship between perceived wage disparity and progressive job satisfaction according to Bruggemann (1974), in such a way that for employees with a promotion-focused career orientation, the relationship between perceived wage disparity and progressive job satisfaction is positive.*

Perceived wage disparity was measured by one single item ("How large do you assess the difference between the lowest and the highest wage in your organization?"). Response options ranged from 1 (*very small*) to 5 (*very large*) in a 5-point Likert scale (Jonas, Stroebe, & Hewstone, 2007, pp. 207-208). The single item approach of measuring perceived wage disparity has also been used by Brunner (2009).

Career orientation. We used the conceptualization of Gerber et al. (2009) that distinguishes between the four types of career orientation: independent-, promotion-focused-, loyalty-focused-, and disengaged career orientation (Gerber et al., 2009, p. 313). For testing our hypotheses, we only used the two career orientations, which have a high score in the advancement dimension. Namely, we used the independent and the promotion-focused types of career orientation. Nine items were employed to measure the types of career orientation. The launching question for all nine items was "If you consider your future working life, which one of the two possibilities would you choose?" For each item, the participants had to choose between two antithetic answer options (e.g. "A variety of jobs on the same hierarchical level" or "Aim for a higher hierarchical level"). This approach of measuring career orientation was developed by Gerber et al. (2009). To assign each participant to the correspondent types of career orientation, we used an exploratory latent class analysis according to Gerber et al. (2009, pp. 308-309). The variables promotion-focused and independent career orientation, designed as dummy-variables (0 = no; 1 = yes, refers to the class membership), resulted out of the analysis.

Control variables. According to existing research, age positively influences job satisfaction (Bedeian, Ferris, & Kacmar, 1992, p. 45). Further, existing literature shows that gender correlates with job satisfaction (Sloane & Williams, 2000, pp. 491-496). Bedeian et al. (1992, p. 45) state in their research, that organizational tenure positively correlates with job satisfaction. Also, a higher educational level proves to have a negative effect on job satisfaction (Gerber et al., 2009, p. 308; Clark & Oswald 1996, p. 373). Due to these reasons, we controlled for age, gender, organizational tenure, and educational level. Age and organizational tenure were measured in years. Gender was a dichotomous variable coded as 0 = female and 1 = male. The variable for the highest completed education comprised six levels: 1 = compulsory education, 2 = apprenticeship, 3 = general qualification for university entrance, 4 = college of higher education, 5 = higher vocational school, 6 = university degree / PhD.

Besides these four variables, we controlled for income, position and contract of employment. Literature shows that the three variables correlate with job satisfaction (Clark & Oswald 1996, pp. 372-375, O'Reilly & Roberts, 1975, p. 149). Monthly gross income at 100% employment contained six levels with 1 = "earn less than 2'000 CHF," 2 = "earn between 2'001 and 4'000 CHF," 3 = "earn between 4'001 and 6'000 CHF," 5 = "earn between 8'001 and 10'000 CHF," and 6 = "earn more than 10'000 CHF." The variable position included six levels. Out of the six levels we defined a dichotomous variable with 1 = employee with supervisory functions and 0 = employee without supervisory functions. Contract of employment was a dichotomous variable with 0 = not limited and 1 = temporary.

Analysis

We conducted two analyses to test the two different outcomes of general job satisfaction and progressive job satisfaction according to Bruggemann (1974). For the two analyses, we used a linear regression model. In both analyses, we examined the moderating effect of the independent- and promotion-focused type of career orientation. For both moderated regression analyses, the three steps according to Baron and Kenny (1986, pp. 1174-1176) were conducted. In the first step, we included our control variables age, gender, organizational tenure, educational level, income, position, and contract of employment in the regression model. In a second step, the two main effect terms, perceived wage disparity as well as the independent, respectively the promotion-focused type of career orientation were included. Finally, we created the two interaction terms (perceived wage disparity x independent career orientation as well as perceived wage disparity x promotion-focused career orientation) and included these two interaction terms in a third step. To limit the potential for multicollinearity, perceived wage disparity, independent, as well as promotion-focused career orientation were standardized before building the interaction terms (Aiken and West, 1991, p. 194). Furthermore, we checked both analyses for autocorrelation with a Durbin-Watson test (Crown, 1998, pp. 89-91). In both analyses, we did not find any autocorrelation. Summing up, we conducted for each of the two analyses two regressions.

Results

Table I presents the means, standard deviations, and correlations of the measured variables for both analyses. There existed a negative and statistically significant correlation between perceived wage disparity and general job satisfaction ($r = -0.101$, $p < 0.01$). The correlation between perceived wage disparity and job satisfaction measured with the Bruggemann variable of progressive job satisfaction was also negative ($r = -0.029$) but not statistically significant ($p = 0.292$). Gross income ($r = 0.092$, $p < 0.01$ in the analysis with general job satisfaction; $r = 0.073$, $p < 0.01$ in the analysis with progressive job satisfaction), educational level ($r = 0.040$, $p = 0.145$ in the analysis with general job satisfaction; $r = 0.113$, $p < 0.01$ in the analysis with progressive job satisfaction), and position ($r = 0.073$, $p < 0.01$ in the analysis with general job satisfaction; $r = 0.122$, $p < 0.01$ in the analysis with progressive job satisfaction) correlated positively with all three measures of job satisfaction in the two analyses. Tenure and age revealed mixed correlations with job satisfaction. While they positively correlated with general job satisfaction ($r = 0.082$, $p < 0.01$ for tenure; $r = 0.082$, $p < 0.01$ for age), both were negatively correlated with progressive job satisfaction ($r = -0.128$, $p < 0.01$ for tenure, and $r = -0.167$, $p < 0.01$ for age). Gender correlated positively with job satisfaction, but not with job satisfaction ($r = 0.018$, $p = 0.507$) or progressive job satisfaction ($r = 0.037$, $p = 0.177$). Contract of employment correlated negatively with job satisfaction but was not statistically significant ($r = -0.016$, $p = 0.565$ in the analysis with general job satisfaction; $r = -0.022$, $p = 0.413$ in the analysis with progressive job satisfaction).

TABLE II: Descriptive statistics for the analyses with general job satisfaction and progressive job satisfaction

Variable	M	SD	1	2	3	4	5	6	7	8	9	11	12
1. Tenure	10.38	9.27											
2. Male	0.56	0.50	.098**										
3. Age	44.28	10.29	.517**	.043									
4. Gross income	3.97	1.18	.157**	.236**	.217**								
5. Education	3.45	1.64	-.090**	.097**	-.044	.489**							
6. Position	0.37	0.48	.059*	.221**	.062*	.300**	.126**						
7. Contract	0.08	0.27	-.149**	-.034	-.130**	-.107**	.083**	-.062*					
8. PWD	3.73	1.05	-.010	-.032	-.101**	.048	.002	.019	.035				
9. PFCO	0.28	0.45	.084**	.075**	-.004	-.011	-.066*	.057*	-.037	.031			
10. ICO	0.18	0.38	-.159**	.097**	-.201**	.094**	.120**	.121**	.009	.038	-.291**		
11. General JS	7.35	1.66	.082**	.018	.082**	.092**	.040	.073**	-.016	-.101**	.087**	-.100**	
12. Progressive JS	0.27	0.44	-.128**	.037	-.167**	.073**	.113**	.122**	-.022	-.029	.021	.166**	.225**

N = 1,331
*** p < 0.001
** p < 0.01
* p < 0.05
Abbreviations/Explanations:
4. Gross income: gross income at a 100% employment
6. Position: employee with or without supervisory function
7. Contract: contract of employment
8. PWD: perceived wage disparity
9. PFCO: promotion-focused career orientation
10. ICO: independent career orientation
11. General JS: general job satisfaction
12. Progressive JS: progressive job satisfaction according to Bruggemann (1974)

Test of Hypotheses

Table II contains the results of the analyses including general job satisfaction for the three-step approach outlined by Baron and Kenny (1986, pp. 1174-1176) for Hypothesis 1a and Hypothesis 2a. Step one reveals that no control variable has a statistically significant influence on general job satisfaction in contrast to the statistically significant correlations from the descriptive statistics (gross income: $p = 0.098$; educational level: $p = 0.687$; position: $p = 0.074$; age p: = 0.607, tenure: p= 0.110). Step two shows that perceived wage disparity has a negative and statistically significant impact on general job satisfaction ($\beta = -0.102$, $p < 0.001$). The independent type of career orientation has a negative influence on general job satisfaction ($\beta = -0.102$, $p < 0.001$). Thus, there exists a direct negative effect of independent career orientation on general job satisfaction. In contrast, the promotion-focused type has statistically significant, positive influence on general job satisfaction ($\beta = 0.987$, $p < 0.01$). Therefore, there exists a direct positive effect of promotion-focused career orientation on general job satisfaction. Step three shows that the moderating effect of the independent career orientation on the relationship between perceived wage disparity and general job satisfaction is slightly positive but statistically insignificant (ICO: $p = 0.354$). The moderating effect of the promotion-focused career orientation on the relationship between perceived wage disparity and general job satisfaction is slightly negative but statistically insignificant (PFCO: $p = 0.836$). Consequently, Hypothesis 1a and Hypothesis 2a are not supported. Table 2 further illustrates that the integration of perceived wage disparity and the particular career orientation increases the R-Squared (change in $R^2 = 0.020$ for ICO and change in $R^2 = 0.018$ for PFCO). Therefore, including perceived wage disparity as well as the particular career orientations leads to a higher, but statistically insignificant explanation of the variance (ICO: 2.0 % and PFCO: 1.8 %) encompassed by our regression model.

Table III contains the results of the analysis including progressive job satisfaction for the three-step approach for Hypothesis 1b and Hypothesis 2b. Step one shows that on one hand, age ($\beta = -0.156$, $p < 0.001$) and tenure ($\beta = -0.063$, $p < 0.05$) have a negative influence on progressive job satisfaction. On the other hand, position ($\beta = 0.109$, $p < 0.001$) and educational level ($\beta = 0.069$, $p < 0.05$) have weak positive influences on progressive job satisfaction, which are also statistically significant. Gender and gross income do influence progressive job satisfaction positively, but they were not statistically significant (gender: $p = 0.796$, gross income: $p = 0.198$).

In addition, contract has a negative, but statistically insignificant influence on progressive job satisfaction ($p = 0.094$). Step two shows that in the analysis with the independent career orientation, perceived wage disparity has a slightly negative impact on progressive job satisfaction, which is statistically significant on the 10% significance level, but statistically insignificant on the 5% significance level (ICO: $\beta = -0.050$, $p = 0.060$). In contrast, in the analysis with the promotion-focused career orientation, perceived wage disparity has no statistically significant influence on progressive job satisfaction (PFCO: $p = 0.067$). The independent type of career orientation has a positive influence on progressive job satisfaction ($\beta = 0.108$, $p < 0.001$). Thus, there exists a direct negative effect of independent career orientation on progressive job satisfaction. The promotion-focused type has no statistically significant influence on general job satisfaction ($p = 0.372$). Step three shows that the moderating effect of the independent career orientation on the relationship between perceived wage disparity and progressive job satisfaction is positive, but the interaction term does not have a statistically significant influence on progressive job satisfaction (ICO: $p = 0.896$). In contrast, the moderating effect of the promotion-focused career orientation on the relationship between perceived wage disparity and progressive job satisfaction has a positive and statistically significant influence on the 10% significance level but has a statistically insignificant influence on the 5% significance level (PFCO: $\beta = 0.049$, $p = 0.069$). Thus, the moderating effect on the relationship between perceived wage disparity and progressive job satisfaction is not statistically significant. Therefore, Hypothesis 1b and Hypothesis 2b cannot be supported. Table III further illustrates that the integration of perceived wage disparity and the particular career orientation increases the R-Squared (change in $R^2 = 0.013$ for ICO and change in $R^2 = 0.003$ for PFCO). Hence, including perceived wage disparity as well as the particular career orientations leads to a higher, but statistically insignificant, explanation of the variance (ICO: 1.3 % and PFCO: 0.3 %) encompassed by our regression model.

TABLE III: Moderated regression analysis for the independent and promotion focused career type, referring to general job satisfaction						
	Dependent variable: General job satisfaction					
	Independent career orientation			Promotion-focused career orientation		
Variables	β Step 1	β Step 2	β Step 3	β Step 1	β Step 2	β Step 3
Controls						
Tenure	.052	.048	.047	.052	.049	.048
Male	-.015	-.013	-.013	-.015	-.026	-.026
Age	.041	.008	.009	.041	.031	.031
Gross in-come	.057	.076*	.077*	.057	.070*	.071*
Education	.013	.013	.012	.013	.013	.013
Position	.052	.062*	.062*	.052	.049	.048
Contract	.005	.007	.008	.005	.011	.011
Predictors						
PWD		-.102***	-.102***		-.106***	-.106***
ICO		-.102***	-.104***			
PFCO					.087**	.088**
Moderators						
PWD x ICO			.025			
PWD x PFCO						-.006
Adjusted R^2	0.012	0.030	0.030	0.012	0.028	0.027
ΔR^2 Change	0.017	0.020	0.001	0.017	0.018	0.000
ΔF	3.227**	13.740***	0.861	3.227**	12.252***	0.043

N = 1331
Standardized beta coefficients are reported
Statistical test are * $p < 0.05$ ** $p < 0.01$ *** $p < 0 .001$
Abbreviations/Explanations:
Gross income: gross income at 100% employment
Position: employee with or without supervisory functions
Contract: contract of employment
PWD: perceived wage disparity
ICO: independent career orientation
PFCO: promotion-focused career orientation

TABLE IV: Moderated regression analysis for the independent and promotion-focused career type, referring to progressive job satisfaction						
	Dependent variable: Progressive job satisfaction					
	Independent career orientation			Promotion-focused career orientation		
Variables	β Step 1	β Step 2	β Step 3	β Step 1	β Step 2	β Step 3
Controls						
Tenure	-.063*	-.050	-.050	-.063*	-.062*	-.059
Male	.007	-.003	-.003	.007	.003	.003
Age	-.154***	-.142***	-.142***	-.154***	-.160***	-.164***
Gross income	.044	.041	.041	.044	.049	.048
Education	.069*	.061	.061	.069*	.068*	.068*
Position	.109***	.100***	.099***	.109***	.108***	.110***
Contract	-.046	-.042	-.042	-.046	-.043	-.044
Predictors						
PWD		-.050	-.051		-.049	-.049
ICO		.108***	.108***			
PFCO					.024	.022
Moderators						
PWD x ICO			.003			
PWD x PFCO						.049
Adjusted R^2	0.054	0.066	0.065	0.054	0.056	0.058
ΔR^2 Change	0.059	0.013	0000	0.059	0.003	0.002
ΔF	11.932***	9.315***	0.017	11.932***	2.030	3.312

N = 1331
Standardized beta coefficients are reported
Statistical test are * $p < 0.05$ ** $p < 0.01$ *** $p < 0 .001$
Abbreviations/Explanations:
Gross income: gross income at 100% employment
Position: employee with or without supervisory functions
Contract: contract of employment
PWD: perceived wage disparity
ICO: independent career orientation
PFCO: promotion-focused career orientation

Discussion

In this study, we examined if career orientation moderates the relationship between perceived wage disparity and job satisfaction. Our motivation was to inform the controversy about the effect of perceived wage disparity on job satisfaction. The controversy is based on two different views. Each view predicts a different effect on job satisfaction. On the one hand, the behavioral view predicts a negative effect of perceived wage disparity on job satisfaction. The negative effect is explained by Adams' equity theory (1965) and Fehr and Schmidt's theory of fairness (1999). Therefore, we expected a negative direct effect of perceived wage disparity on job satisfaction. On the other hand, the economic view predicts a positive effect of perceived wage disparity on job satisfaction. Lazear and Rosen's tournament theory (1981) provides reasons for the positive effect. We argued that employees who want to hierarchically move upwards would perceive their career as a tournament according to Lazear and Rosen (1981). In the conceptualization of Gerber et al. (2009), employees who want to hierarchically move upwards belong to such a type of career orientation that is characterized by a high score in the advancement dimension. Accordingly, the independent, and the promotion-focused career type should be incentivized by large perceived wage disparity. As motivation and job satisfaction correlate highly positive (Lawler, 1969, pp. 432-434; Tella et al., 2007, p. 5), we expected perceived wage disparity to have a positive effect on job satisfaction by including the moderating terms of the independent and the promotion-focused career type.

We found a negative effect of perceived wage disparity on general job satisfaction. This finding is in line with the behavioral view and results from studies conducted in the past (Brown, 2001, p. 892; Martin, 1982, p. 120; Oldham et al., 1986, p. 28; Pfeffer & Langton, 1993, pp. 397-399). Pfeffer and Langton (1993, p. 404) find that the negative effect of wage disparity is dependent on factors such as information about wages and where the particular employee's own wage fell in the wage distribution. With more information about other individuals' wages or the lower the individual's position in the wage distribution, individuals will be less satisfied with their own wage (Pfeffer & Langton, 1993, pp. 400-401). In our study, the employees' information about wages is captured by the question of how large the employees assess the difference between the lowest and the highest wage in their organization. Hence, we can exclude the amount of information about other individuals' wages as an alternative explanation in our study. Additionally, we controlled for the employees' gross incomes.

In doing so, we can exclude participants' positions in the wage distribution as alternative explanation as well. Thus, we conclude that actual wage disparity negatively effects job satisfaction.

We could not replicate the positive effect of perceived wage disparity on general or progressive job satisfaction according to our moderator hypotheses. This could be due to our data. In our study, we had cross-sectional data. In contrast, Clark et al. (2009, pp. 434-435) employ matched employer-employee panel data over an eight-year period. Clark et al. (2009, p. 430) show that the higher the other workers' wages at the particular firm, the higher the job satisfaction of the particular employee. They argue that the result depends on the strength of the correlation between the current reference group income and the particular employee's future earnings. Clark et al. (2009, pp. 431-434) explain that with co-workers from the same firm as reference group, a positive signaling effect takes place. This effect provides the worker of a particular firm with information about future earnings in this firm. The positive signaling effect outweighs the negative status effect (Clark et al., 2009, pp. 431-434), which occurs when individuals feel deprived as their co-workers' wages are higher than their own wages. In contrast with cross-sectional data, we may now claim that the negative status effect outweighs the positive signaling effect. This finding might be due to the fact that with cross-sectional data, the correlation between the current reference group income and the particular employee's future wage is not strong enough. Consequently, the relationship between perceived wage disparity and job satisfaction remains negative in our study.

Theoretical Implications

Our research suggests that a high future orientation is essential in replicating the tournament theory's results (Lazear and Rosen, 1981). High future orientation leads to the consequence that an individual values a dollar in the future considerably more than a dollar today (Frederick, Loewenstein, & O'donoghue, 2002, pp. 355-356). High future orientation further favors Clark et al. (2009, pp. 431-434) signaling effect, because the employees consider perceived wage disparity as a chance for their own future earnings. In our sample, the 1331 employees value the future only slightly more than the present with 52% of the employees answering that they plan more for the future than they live in the present, when considering their working life (Grote & Staffelbach, 2008, p. 92). To gain deeper knowledge on the relationship between perceived wage disparity and job satisfaction, we suggest including future orientation into the theoretical framework of perceived wage disparity and its consequences on job satisfaction.

Besides high future orientation, a comparative environment, where pay differences are associated with promotions within the firm (Lazear, 1998, p. 207), is necessary in reproducing the tournament theory's incentive effect. In this comparative environment, the firm's employees want to move upwards and compare each other's wages. As they try to earn the same or more than their co-workers, the comparison acts as incentive (Lazear & Rosen, 1981, p. 841). Several authors such as Backes-Gellner and Pull (2013, p. 381) or Henderson and Fredrickson (2001, p. 102) show this tournament incentive. All of them use panel data. As the incentive effect is long-term oriented, we conclude that researchers should employ panel data instead of cross-sectional data when aiming to replicate the tournament theory's incentive effect.

Practical Implications

We showed that perceived wage disparity has a negative effect on job satisfaction. As job satisfaction is linked to performance (Judge, Thoresen, Bono, & Patton, 2001, p. 376), firms need to be aware that perceived wage disparity influences their economical performance. To change the effect of perceived wage disparity on job satisfaction, organizations should purposefully manage the moderating factors, described by Pfeffer and Langton (1993, p. 401). Higher commitment to the organization, consensus about the evaluation criteria, and fairness in the wage allocation process lead to less dissatisfaction about wage disparity. By intensifying the named factors, firms may change the negative effect of perceived wage disparity on job satisfaction. Thus, the firm's economic performance can be increased.

Research has shown that in certain environments, the tournament theory (Lazear & Rosen, 1981) holds true (Backes-Gellner & Pull, 2013, pp. 375-377; Henderson & Fredrickson, 2001, pp. 98-99; Clark et al., 2009, p. 431). According to the self-selection effect (Lazear & Shaw, 2007, pp. 9-10), we expect employees who want to move upwards to select themselves into competitive environments. Hence, employees with a promotion-focused or an independent career orientation select themselves into firms where a strong competition among co-workers exists. In return, the number of independent and promotion-focused employees may serve as proxies for characteristics that are related to the particular competitive level of the environment.

Limitations and Future Research

Like any other study, our study has potential limitations. First, our data was obtained through self-reports. Consequently, we have to be cautious about the method of measurement effect (Spector, 2006, pp. 222-223). This effect might change the contestants' assessments of a variable during the survey. In our study, according to the measurement effect, the employee's attitude of wage disparity can be affected by answering the interviewer's questions. This is due to the fact that the employee deals with the question in a way he or she has not done it before.

Second, the data to test our hypothesis is cross-sectional. Cross-sectional data is collected at a single point of time. This fact limits causal inference (Rindfleisch, Malter, Ganesan, & Moorman, 2008, pp. 261-262). Thus, we cannot be sure if larger perceived wage disparity induced less job satisfaction or if larger perceived wage disparity was due to less job satisfaction. Note, however, that our findings are in-line with the behavioral view's explanations. Nevertheless, future research should engage longitudinal designs wherein data is collected over repeated observations to provide greater insights into the causal relationships between perceived wage disparity and job satisfaction.

Further, the objective wage disparity depends on the firm size. In a large firm, wage disparity is naturally higher than in a small firm, where there are fewer employees and less hierarchical levels. Firm size may affect job satisfaction because of the firm size-specific working climate. Additionally, in a small firm, employees could identify more with the firm than in a large firm, where each employee is only responsible for a very specific task. Firm size independent of wage disparity can affect job satisfaction. Thus, future research should control for firm size.

Moreover, we encourage including not only the German-, and French-speaking parts of Switzerland in the baseline sample, but as well the Italian-, and Romansh-speaking parts of Switzerland. The Italian-speaking part of Switzerland is designated through small firms, such as viniculture firms (Repubblica e Cantone Ticino, 2013). These firms are more often organized as family establishments than the firms in the German- and French-speaking parts of

Switzerland. Employees in the German- and French-speaking parts of Switzerland might be more individual-oriented. In contrast, employees in the Italian-speaking part might be more community-, or family-oriented due to the firms that are organized as family establishments. Thus, wage disparity might be perceived differently in a family establishment or if individuals are more family-orientated. This leads to a different effect on job satisfaction.

Finally, future researchers should consider including psychological moderators. Barrick and Mount (1991, pp. 17-18) find that especially one dimension of the big five personality dimensions, namely conscientiousness, predicts better job performance. We believe that an individual's personality influences not only job performance but also the perception of wage disparity and the effect of wage disparity on job satisfaction. Future research should concentrate on the big five personality dimensions and assess for each personality dimension if it affects the relationship between perceived wage disparity and job satisfaction.

Conclusion

In the literature, there is contradictory empirical evidence on the relationship between perceived wage disparity and job satisfaction. The negative effect of perceived wage disparity on job satisfaction is explained by Adams' equity theory (1965) and Fehr and Schmidt's theory of fairness (1999). In contrast, Lazear and Rosen's tournament theory (1981) explains the positive effect of perceived wage disparity on job satisfaction. We were able to replicate the negative effect of perceived wage disparity on job satisfaction according to the behavioral view. But we were not able to replicate the positive effect of perceived wage disparity on job satisfaction by including our moderator variables of career orientations with a high advancement dimension. Thus, our findings do not provide evidence that the independent and the promotion-focused career orientation influence the relationship between perceived wage disparity and job satisfaction. Consequently, the controversy continues.

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PERCEIVED WAGE TRANSPARENCY AND TURNOVER INTENTION: THE MODERATING EFFECT OF PERCEIVED WAGE DISPERSION

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Abstract: This study examines the relationship between perceived wage transparency and turnover intention. We argue that perceived wage transparency can be split into two aspects: perceived procedural wage transparency (i.e., understanding of the wage setting process) and perceived distributive wage transparency (i.e., knowledge about who gets how much). For the latter aspect, we included perceived wage dispersion as a moderator. The empirical analysis, which was conducted with a representative sample of Swiss employees, revealed a negative effect of perceived procedural wage transparency on turnover intention. Furthermore, we found a positive effect of perceived distributive wage transparency on turnover intention, but only in a setting of high wage dispersion. Implications for research and HR practice are discussed.

Keywords: Perceived wage transparency, procedural wage transparency, distributive wage transparency, turnover intention, moderation effect, wage dispersion

Introduction

„I want WAGE TRANSPARENCY and FAIR WAGES[3]", with this slogan, the women section of the Social Democratic Party of Switzerland (SP Frauen Schweiz) wants to raise awareness for the still existing wage inequality between males and females. Thus, the SP implicitly claims that wage transparency is important and beneficial. Further, the SP explicitly outlines the difference between wage transparency and wage itself. The statement indicates that transparency is desirable and worth to be achieved.

Distributing rewards among employees is one of the most critical tasks a company has to face (Bloom & Michel, 2002). As Tekleab, Bartol and Liu (2005) summarize, rewards not only enhance retention, but can also induce feelings of unfairness. Feelings of unfairness can evolve either through the perception that the distribution of rewards is not fair or through the perception that the process – how the outcome was derived – is not fair (Tekleab et al., 2005). Transparency seems to be a legitimate approach to meet the issue of unfairness. By referring to organizational justice theory (Colquitt, Conlon, Ng, Wesson, & Porter, 2001; Greenberg, 1990), we define perceived wage transparency as how clear employees perceive the communication of criteria according to which wages are set (perceived procedural wage transparency) and communication about the wages themselves (perceived distributive wage transparency).

Given the definition of perceived wage transparency, procedural as well as distributive aspects of perceived wage transparency are considered in this paper. We argue that perceived procedural wage transparency is part of the established criteria of procedural justice by Leventhal (1980). Therefore, we base our definition of perceived procedural wage transparency on procedural justice, which is defined as "…the fairness of the process by which outcomes are determined" (Lind & Tylor, 1988, cit. in Cohen-Charash & Spector, 2001, p. 280). Research was able to show that procedural justice yields favourable outcomes in terms of job satisfaction (Mossholder, Bennett, & Martin, 1998) or organizational commitment (Masterson, Lewis, Goldman, & Taylor, 2000).

[3] Translated from German

Analog to perceived procedural wage transparency, we define perceived distributive wage transparency on the basis of distributive justice, another organizational justice theory construct. Distributive justice is, according to equity theory (Adams, 1965), defined as the perceived fairness of the ratio between input and outcome. Put differently, whether the received reward (outcome) is perceived as fair in comparison to work performed (input) (Greenberg, 1986). Thereby, not the absolute level of reward counts, but the relative reward compared to relevant others (Greenberg, 1990).

Turnover intention has been consistently found to be the strongest predictor of turnover (Carsten & Spector, 1987; Mobley, Horner, & Hollingsworth, 1978; Tett & Meyer, 1993). Turnover intention can be defined as "…a conscious and deliberate willfulness to leave the organization" (Tett & Meyer, 1993, p.262). Furthermore, turnover is directly linked with costs, which can be distinguished in separation costs, replacement costs and training costs (Cascio, 1991). Thus, turnover intention is an important factor and must be considered by organizations. A great variety of turnover intention predictors have been considered in the existing literature, including job satisfaction (Dickey, Watson, & Zangelidis, 2011; Eberhardt, Abdullah, & Moser, 1995; Hellman, 1997), wage dispersion (Bloom & Michel, 2002; Lazear, 1999; Messersmith, Guthrie, Ji, & Lee, 2011), and organizational commitment (Tett & Meyer, 1993).

Despite the large body of research concerning turnover intention, the effect of perceived wage transparency on turnover intention has thus far not been examined to our knowledge. Our goal is to fill this gap with insights by examining how perceived wage transparency affects turnover intention. More precisely, we want to examine the effects of perceived procedural wage transparency and perceived distributive wage transparency on turnover intention. In the latter relationship, we will examine whether wage dispersion moderates the effect between perceived distributive wage transparency and turnover intention. Wage dispersion "refers to the amount of difference (inequality) in pay created by a firm's pay structure" (Bloom & Michel, 2002, p. 33). Research has shown that wage dispersion influences job satisfaction negatively (Pfeffer & Langton, 1993) and furthermore, increases turnover intention (Lambert, Larcker, & Weigelt, 1993; Lazear, 1995).

The current study enriches the existing literature with the following four contributions. First, we derive why wage transparency is an important determinant of turnover intention based on organizational justice theory. Second, we follow the line of argumentation of organizational justice literature and introduce a distinction between two aspects of wage transparency. That is, we distinguish between perceived procedural wage transparency (i.e., understanding how the wage is set) and perceived distributive wage transparency (i.e., the knowledge about who gets how much). Third, by including a moderator, we analyse whether wage dispersion moderates the effect of perceived distributive wage transparency on turnover intention. Finally, we test our hypotheses empirically, based on a representative sample of the German and French speaking parts of Switzerland, and thus contribute to the existing literature with results conducted with data from Switzerland.

Theoretical Background and Hypotheses

Equity theory (Adams, 1965) states that employees assess fairness based on wage comparisons with co-workers and that employees further compare the ratio between perceived work inputs (i.e., effort invested) and perceived work outcomes (i.e., wage). Then, employees choose their level of effort based on the resulting ratio. This means that employees, who perceive to be getting a lower wage compared to the work inputs, will reduce their efforts in order to balance the ratio again. Put differently, equity theory (Adams, 1965) states that, given a certain wage, employees choose their effort level in order to reach the same perceived ratio as the other employees. This indicates that employees prefer equality over inequality. Inequality can further be differentiated into advantageous and disadvantageous inequality (Fliessbach et al., 2012). Disadvantageous inequality exists when an employee perceives his ratio as too low, that is, that the employee has the perception that given his effort, he should receive a higher wage. Employees who perceive their ratio as too high experience advantageous inequality, that is, they perceive their wage to be higher than their invested effort.

Research provides evidence that employees actually compare their wages with their co-workers and that these comparisons affect employees' performance (Clark, Masclet, & Villeval, 2010; Gächter & Thöni, 2010; Ockenfels, Werner, & Sliwka, 2010). Furthermore, these studies indicate that advantageous and disadvantageous inequality affect performance asymmetrically which was be confirmed by Fliessbach et al. (2012). Each of these studies explicitly provides knowledge about co-workers wages. The findings of Greiner, Ockenfels and Werner (2011) show that employees react differently to dispersed wages when they know the wages of their co-workers. These findings support that knowledge of co-workers' wages is a requirement to evaluate the ratio between effort invested and wage received. Greiner, Ockenfels and Werner (2011) found that "under purely private wage information, we do not observe performance differences between high wage and low wage workers" (Greiner et al., 2011, p. 236), whereas in case of public wage information (i.e., workers know their co-workers wage) performance differences existed. This indicates that having information about wages affects employees' behaviours.

Greiner et al. (2011) define this knowledge about co-workers' wages as wage transparency. However, in our case, this definition is insufficient as it is too narrow. We argue that knowledge about co-workers' wages is only one part of wage transparency. Besides transparency regarding the distribution of wages (i.e., knowledge about co-workers wages), wage transparency can also refer to the wage setting process (i.e., how the wage is determined). Therefore, we defined perceived wage transparency earlier as how clear employees perceive the communication of all criteria according to which wages are set (procedural aspect) and the communication about the wages themselves (distributive aspect).

This definition links perceived wage transparency to organizational justice. The differentiation of perceived wage transparency into perceived procedural wage transparency and perceived distributive wage transparency is in line with organizational justice literature, which distinguishes (among others) between procedural and distributive justice (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Greenberg, 1990). Procedural and distributive justice are important concepts when evaluating pay issues (Tekleab et al., 2005) and serve as an appropriate framework to develop our hypotheses.

Perceived procedural wage transparency is related to procedural justice, that is, how fair employees perceive processes and procedures (Greenberg, 1990; Lind & Tyler, 1988). Procedural justice exists when employment processes embody normatively accepted principles (Cohen-Charash & Spector, 2001). Leventhal (1980) established six such criteria. The meta-study of Cohen-Charash and Spector (2001) validated the explanatory power of these criteria for the concept of procedural justice. They also give a compehensive review of these criteria.

In short, they say that a process must be (1) consistent over people and time, must (2) have an unbiased judge, and (3) use the best avaliable information. Futher, the receiver must have (4) the ability to correct unfair outcomes, (5) all affected parties must participate in the process, and (6) the process must be compatible with the fundamental moral and ethical values of the perceiver (Cohen-Charash & Spector, 2001).

In our definition of perceived procedural wage transparency, we put emphasis on the clear communication of criteria, which affect the wage setting process. Implicitly, this assumes consistency of all relevant criteria. Inconsistency of the relevant criteria could cause confusion about which criteria are relevant at the moment. Consequently, employees would have the perception that the relevent criteria are not clearly communicated, which stands in contradiction to our definition. Therefore, we see perceived procedural transparency as a part of procedural justice. In our argumentation employees perceive procedural wage transparency if the wage setting process is consistent and the employees receive information on how and according to which criteria wages are determined.

Given the argumentation that perceived procedural wage transparency is a part of procedural justice, we expect that increased perceived procedural wage transparency lowers turnover intention. Research found that employees value procedural justice and it thus increases desirable outcomes such as team performance (Colquitt, Noe, & Jackson, 2002), job satisfaction (Mossholder et al., 1998) and organizational commitment (Masterson et al., 2000). Furthermore, research provides evidence that procedural justice is associated with lower turnover intention (Cohen-Charash & Spector, 2001). Therefore, our first hypothesis is:

Hypothesis 1: *Higher perceived procedural wage transparency leads to lower turnover intention*

Distributive justice focuses on the perceived fairness of outcomes. That is, if employees perceive their ratio of effort spent and wage received as equal to the ratio of their co-workers (Adams, 1965). In this regard, research states that less dispersed wages "create a more egalitarian environment" (Bloom & Michel, 2002, p. 34) and that the perception of distributive fairness lowers turnover intention (Cohen-Charash & Spector, 2001). On the contrary, higher wage dispersion leads to increased turnover intention (Bloom & Michel, 2002; Shaw, Gupta,

& Delery, 2002). Higher perceived distributive wage transparency increases the knowledge of the wages of co-workers. However, the effect of perceived distributive wage transparency is ambiguous. Lawler (1971) assumes that in absence of information of co-workers wages, people assume the worse. That is, they believe that they face high wage dispersion. Thus, they would perceive distributive unfairness and consequently have higher turnover intention. Contradictory to this, Pfeffer and Langton (1993) argue that employees perceive wages less dispersed in case of intransparency. Given our argumentation that the perception of distributive wage transparency reveals the dispersion of wages, the effect of perceived distributive wage transparency can either increase or decrease turnover intention. Thus, we expect perceived distributive wage transparency to have two contradicting effects. In other words, we expect that the effect of perceived distributive wage transparency is not different from zero. This leads to our second hypothesis:

Hypothesis 2: *Perceived distributive wage transparency has no significant effect on turnover intention*

Following this argumentation, we expect perceived distributive wage transparency to be dependent on the level of perceived wage dispersion; that is, assessing the contradicting effects individually. Because increased pay dispersion is associated with less equality, we predict that perceived distributive wage transparency has a positive effect on turnover intention in situations where employees perceive wage dispersion to be high. Put differently, perceived distributive wage transparency increases turnover intention if employees perceive wage dispersion to be high. In case of low perceived wage dispersion, perceived distributive wage transparency reduces turnover intention. Hence, our third and final hypothesis is:

Hypothesis 3: *Given high perceived wage dispersion, perceived distributive wage transparency has a positive effect on turnover intention*

Methods

Procedures and Sample

The data to test our hypotheses came from the Swiss Human-Relations-Barometer 2008 (Grote & Staffelbach, 2008), which contains a representative data sample gathered from a computer assisted telephone interview (CATI) of employees in the German- and French-speaking parts of Switzerland. The sample consisted of randomly drawn telephone numbers from all telephone numbers registered in Switzerland. The survey included employees who were employed at least 40 percent of the time and were between 16 and 65 years. Individuals who were self-employed or in an apprenticeship were excluded from the study. People were contacted at home, and interviewers checked whether they met the criteria of the target group. The telephone interviews were conducted by 20 interviewers, mainly psychology and economics students, who participated in extensive preparatory training before carrying out the interviews. The survey took place between April and July 2007 (Grote & Staffelbach, 2008).

After the exclusion of incomplete data, the final sample included 1,306 employees in Switzerland (44.5% female). Average age was 44.26 years (SD = 10.30), 73.5% came from the German-speaking part of Switzerland and mean organizational tenure was 10.37 years (SD = 9.28). Furthermore, 48.3% held a bachelor's, master's or equivalent degree. The individuals included in the sample were employed in the whole range of industries.

Measures

The first independent variable, perceived procedural wage transparency, was measured by using two items which were developed by Brunner (2009). The first item was "How satisfied are you with the consistency of your organization's wage policy?" and the second item was "How satisfied are you with the information provided by your company on wage issues which are relevant for you?" Both items were measured on a 5-point Likert scale ranging from 1 (not at all satisfied) to 5 (extremely satisfied). Cronbach's alpha for the two items was 0.79.

The second independent variable, perceived distributive wage transparency, was measured with a single item ("How much do you know about the wages of other positions in your organization?"). In this case, the responses were also measured on a 5-point Likert scale ranging from 1 (very little) to 5 (very much).

The moderator variable of perceived wage dispersion is the final independent variable of interest used in our analyses. It was also measured with a single item ("How large do you estimate the difference between the smallest and the largest wage in your organization?"). The responses were measured on a 5-point Likert scale ranging from 1 (very small) to 5 (very large).

We measured the dependent variable *turnover intention* with two items. The first item was "How likely is it that you will voluntarily leave this organization in the following year?" The response options were measured on a 4-point Likert scale ranging from 1 (*very low*) to 4 (*very high).* The second item included four statements reflecting increasing levels of turnover intention, from which the respondents had to choose the one that fits them best (e.g. "I am currently in the process of trying to leave this job"). Cronbach's alpha for the two items was 0.73.

Control Variables. We included several control variables for which previous research suggests an influence on turnover intention. More specifically, we controlled for gender, age, age^2, language, education, tenure, income, employability, job satisfaction, commitment and experienced reorganization. Older people were found to have lower turnover intention (Batt & Valcour, 2003; Blomme, van Rheede, & Tromp, 2010; De Cuyper, Mauno, Kinnunen, & Mäkikangas, 2011). Likewise, job satisfaction (Dickey et al., 2011; Eberhardt et al., 1995; Hellman, 1997), income (Batt & Valcour, 2003; Shaw, Delery, Jenkins, & Gupta, 1998) commitment (Firth, Mellor, Moore, & Loquet, 2004; Wasti, 2003) and tenure (Arnold & Feldman, 1982; Hellman, 1997) were negatively related to turnover intention. High turnover intention, on the other hand, was found in correlation with well-educated employees (Grote & Staffelbach, 2007) and high employability (Benson, 2006) and when reorganization took place (Probst, 2003). Furthermore, we controlled for gender in our study as it is a common approach in studies dealing with turnover intention (De Cuyper et al., 2011; Houkes, Janssen, Jonge, & Bakker, 2003), although previous studies did not find significant effects. Finally, as Switzerland is not only characterized by different languages, but also a specific culture attached to the different languages (Gerber, Wittekind, Grote, Conway, & Guest, 2009), we controlled for language in our analysis as well.

Language (0 = French, 1 = German), gender (1 = female, 2 = male) and reorganization (0 = no, 1 = yes) were assessed dichotomously. Age, age^2 and tenure were measured in years. Education and income were each assessed with one item. Response options for education included 6 alternatives with 1 = obligatory education, 2 = apprenticeship 3 = college degree, 4 = university of applied science, 5 = higher professional school and 6 = university/ MBA/ PhD. Income contained 6 levels with 1 = less than 2'000 CHF, 2 = 2'001 to 4'000 CHF, 3 = 4'001 to 6'000 CHF, 4 = 6'001 to 8'000 CHF, 5 = 8'001 - 10'000 and 6 = more than 10'001 CHF. Employability was assessed with three items (e.g., "I am confident that I would find another job"), and the response options ranged from 1 (very low) to 5 (very high). Cronbach's alpha for the three items was 0.80

Analysis

All hypotheses were tested using linear regression models. To test our hypothesis on the direct effect of perceived procedural wage transparency on turnover intention (hypothesis 1), we conducted a stepwise hierarchical regression analysis. In order to test the hypotheses on the direct effect of perceived distributive wage transparency on turnover intention (hypotheses 2), we used again a stepwise hierarchical regression. To test the moderation effect of perceived wage dispersion (hypotheses 3), we conducted a moderated regression analysis. We employed a three-step approach to test for the moderation, following the guidelines set by Baron and Kenny (1986). As a first step of the hierarchical regression analysis, we entered the control variables: gender, age, age^2, language, education, tenure, income, employability, job satisfaction, commitment and reorganization. In a second step, we added the independent variables perceived wage dispersion and perceived distributive wage transparency to the model. Finally, we entered the interaction term perceived distributive wage transparency * perceived wage dispersion. To reduce the threat of multicollinearity in the model, we z-standardized the independent variables before creating the interaction terms.

Results

Descriptive Statistics

Table I presents the descriptive statistics including means, standard deviations, and correlations. Furthermore, scale reliabilities for all computed scales are provided in parentheses. As can be seen in the correlation matrix (Table I), turnover intention is statistically significantly positively correlated to perceived wage dispersion ($r = .09$, $p < .01$) and statistically significantly negatively correlated to perceived procedural wage transparency ($r = -.29$, $p < .001$). However, turnover intention does not show any significant correlation with perceived distributive wage transparency ($r = -0.04$, $p = .16$) or the moderator ($r = 0.03$, $p = 22$).

Further, Table II reveals that there is a significant but weak negative correlation between perceived wage dispersion and perceived procedural wage transparency ($r = -.11$, $p < .001$), as well as between perceived wage dispersion and perceived distributive wage transparency ($r = -.07$, $p < .01$). Moreover, there exists a weak but significant correlation between perceived procedural wage transparency as a predictor variable and perceived distributive wage transparency ($r = .20$, $p < .001$). The interaction term of perceived distributive wage transparency and perceived wage dispersion does not show significant correlations to any other variables, except gender ($r = .09$, $p < 0.01$) and income ($r = -.06$, $p < 0.05$). Finally, among the control variables, most correlations were significant and the correlation with turnover intention was as expected. However, income does significantly correlate (-.03, $p = .28$) with turnover intention.

TABLE I: Descriptive Statistics, Correlations, and Scale Reliabilities

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Gender[a]	1.55	0.497																
Age	44.26	10.298	.041															
Age^2	2065.34	907.343	.050	.991***														
Language[b]	0.74	0.441	.051	-.056*	-.056*													
Education	3.44	1.636	.099***	-.038	-.052	-.025												
Tenure	10.37	9.280	.095***	.519***	.527***	-.122***	-.087**											
Income	3.96	1.177	.238***	.223***	.198***	-.003	.486***	.165***										
Employability	3.47	1.083	.058*	-.433***	-.449***	.172***	.132***	-.339***	.103***	(.796)								
JS	7.36	1.649	.015	.076**	.075**	.024	.036	.078**	.087**	.080**								
Commitment	3.51	1.030	-.002	.065*	.065*	.084**	-.002	.149***	.072*	.069*	.497***	(.854)						
Reorganization[c]	0.25	0.432	-.047	.097***	.091**	-.063*	.063*	.139***	.086**	-.049	-.086**	-.095**						
pWD	3.73	1.050	-.028	-.090**	-.090**	.095***	-.002	.003	.051	.022	-.105***	-.157***	.113***					
pPWT	3.42	1.092	.015	-.025	-.026	.032	.037	.017	.141***	.084**	.340***	.324***	-.037	-.106***	(.787)			
pDWT	2.76	1.410	.090**	0.029	.024	-.008	.148***	.080**	.215***	.046	.090**	.173***	.033	-.073**	.199***			
pDWT * pWD[d]	-0.07	1.065	.085**	.034	.036	-.038	-.030	.019	-.058*	.008	.002	-.008	.000	.016	-.024	-.019		
TI	1.92	0.867	-.010	-.177***	-.171***	.075**	.087**	-.158***	-.029	.072**	-.454***	-.384***	.098***	.091**	-.291***	-.038	.033	(.727)

N = 1306
*p < .05; **p< .01; ***p< .001
[a] 1 = female; 2 = male
[b] 0 = French; 1 = German
[c] 0 = no; 1 = yes
[d] Calculated on standardized variables
JS = job satisfaction
pWD = perceived wage dispersion
pPWT = perceived procedural wage transparency
pDWT = perceived distributive wage transparency
TI = turnover intention

Regression Analysis

Table II illustrates the results of the hierarchical regression analysis of perceived procedural wage transparency on turnover intention. As shown in the first column of Table II, the control variables age, age squared, language, education, job satisfaction, commitment and reorganization significantly predict turnover intention. Adding perceived procedural wage transparency leads to a statistically significant improvement of our model's predictive power ($\Delta R^2 = 0.017$; $\Delta F = 31.026$; $p < .001$). Furthermore, the second column of Table II shows that perceived procedural wage transparency significantly negatively affects turnover intention ($\beta = -.142$; $p < .001$). These results give support for hypothesis 1, which predicted that perceived procedural wage transparency is negatively related to turnover intention

TABLE II: Results of stepwise hierarchical regression of perceived procedural wage transparency on turnover intention

	Turnover intention	
Variables	β Step 1	β Step 2
Controls		
Gender[a]	-.013	-.014
Age	-.515**	-.545**
Age^2	.420*	.439*
Language[b]	.091***	.084***
Education	.088**	.089**
Tenure	-.005	.017
Income	-.025	-.028
Employability	.068	.068*
Job satisfaction	-.341***	-.308***
Commitment	-.209***	-.180***
Reorganization[c]	.055**	.055**
Predictors		
pPWT		-.142***
Adjusted R^2	.279	.295
ΔR^2	.285	.017
ΔF	46.857***	31.026***

Note: standardized beta coefficients are reported

N = 1306
*p < .05; **p < .01; ***p < .001
[a] 1 = female; 2 = male
[b] 0 = French; 1 = German
[c] 0 = no; 1 = yes
pPWT = perceived procedural wage transparency

Table III shows the influence of our control variables (step 1), the hierarchical regression results for perceived distributive wage transparency (step 2) and the moderating effect of perceived wage dispersion on turnover intention (step 3). Overall, our model gains no significant explanatory power by adding perceived distributive wage transparency ($\Delta F = .497$, $p > .10$). Thus, perceived distributive wage transparency does not show a significant relation to turnover intention ($\beta = 02$, $p = .33$). This result supports our hypothesis 2, which predicted that perceived distributive wage transparency has no significant impact on turnover intentions. This effect remains insignificant when controlling for the interaction term perceived distributive wage transparency * perceived wage dispersion. The interaction effect was found to be significantly positively related to turnover intention (column 3, $\beta = 0.056$; $p < .05$).

TABLE III: Moderated hierarchical regression for perceived wage dispersion and perceived distributive wage transparency on turnover intention

	Turnover intention		
Variables	β Step 1	β Step 2	β Step 3
Controls			
Gender[a]	-.013	-.014	-.020
Age	-.515**	-.515**	-.519**
Age^2	.420*	.420*	.420*
Language[b]	.091***	.089***	.089***
Education	.088**	.089**	.091**
Tenure	-.005	-.008	-.002
Income	-.025	-.026	-.025
Employability	.068	.068	.067
Job satisfaction	-.341***	-.341***	-.342***
Commitment	-.209***	-.213***	-.213***
Reorganization[c]	.055**	.055**	.052**
Predictors			
pDWT		.024	.025
pWD		-.002	-.005
Moderation			
pDWT * pWD[d]			.056*
Adjusted R^2	.279	.278	.281
ΔR^2	.285	.001	.003
ΔF	46.857***	.497	5.628*

Note: standardized beta coefficients are reported

N = 1306
*p < .05; **p < .01; ***p < .001
[a] 1 = female; 2 = male
[b] 0 = French; 1 = German
[c] 0 = no; 1 = yes
[d] Calculated on standardized variables
pDWT = perceived distributive wage transparency
pWD = perceived wage dispersion

This outcome supports our hypothesis 3, which predicted that given high perceived wage dispersion, perceived distributive wage transparency has a positive effect on turnover intention. Overall, adding the interaction term improved our model significantly ($\Delta R^2 = .003$; $\Delta F = 5.628$, $p < .05$).

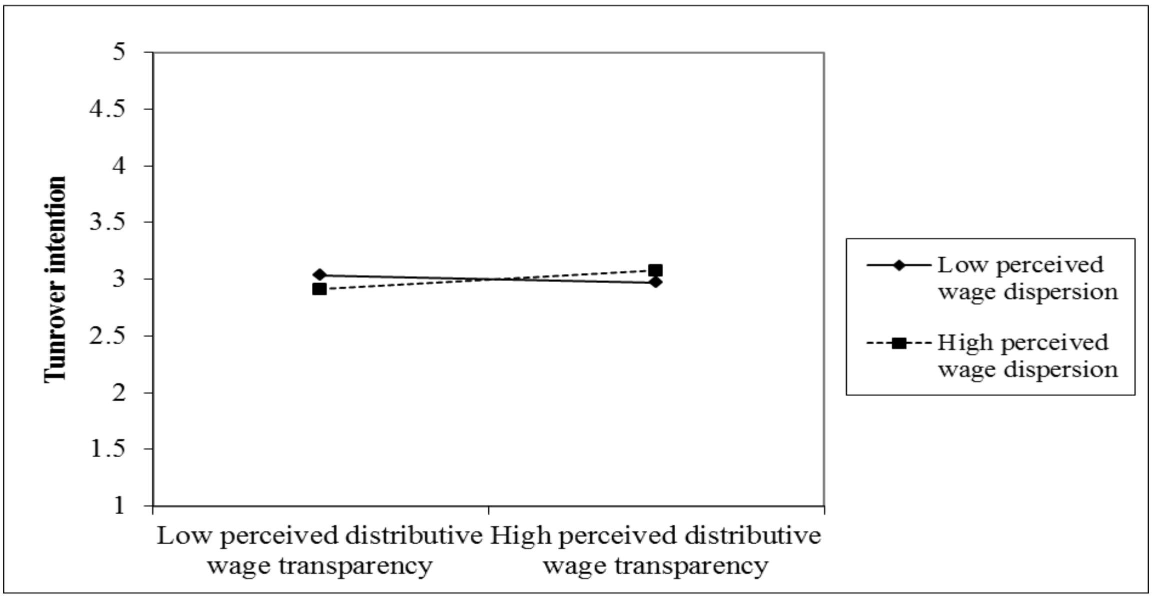

Figure I: **Two-way interaction effect between perceived wage dispersion and perceived distributive wage transparency**

In order to gain a better understanding of the moderator perceived wage dispersion, we plotted the interaction effect in Figure I. The figure illustrates that as perceived wage dispersion is high, the relationship between perceived distributive wage transparency and turnover intention is positive. Put differently, in a setting where employees perceive wage dispersion to be high, perceived distributive wage transparency increases turnover intention. The effect of perceived distributive wage transparency on turnover intention turns negative in a setting of low perceived wage dispersion.

Discussion

In this study, we examined the effect of perceived wage transparency on turnover intention. We argued that perceived wage transparency consists of a procedural and a distributive aspect. This distinction implies that we looked at the transparency of the wage setting process, defined as perceived procedural wage transparency, and transparency regarding the distribution of the actual wages, defined as perceived distributive wage transparency.

The results of our study show that perceived procedural wage transparency has a negative effect on turnover intention and that perceived distributive wage transparency on its own has neither a statistically nor an economically significant effect on turnover intention. However, when including perceived wage dispersion as a moderator, we found that perceived distributive wage transparency has a positive (negative) effect on turnover intention in a setting with high (low) wage dispersion.

In our theory section, we argued that our definition of perceived procedural wage transparency is a part of procedural justice. Therefore, we examine our findings in the light of procedural justice literature. The first hypothesis, which predicted a negative effect of perceived procedural wage transparency on turnover intention, was supported by our analyses. This means that higher transparency about the wage setting process leads to a lower turnover intention. This result implies that perceived procedural wage transparency has a worth on its own and employees perceive transparency about the wage setting process as beneficial. An explanation for that phenomena could be that transparency about the wage setting process provides employees with a better understanding about the conclusion of their salary, which leaves no space for being betrayed, and furthermore, shows clearly how to move up the wage ladder. The findings on perceived procedural wage transparency can be explained by conducted studies concerning the effect of procedural justice on team performance (Colquitt et al., 2002), job satisfaction (Mossholder et al., 1998) and organizational commitment (Masterson et al., 2000). Research was able to show that job satisfaction and commitment are among the most common factors linked to turnover intention (Firth et al., 2004). Taken together, the favorable outcomes of procedural justice on the variables and the correlation between the variables and turnover intention, procedural justice and consequently perceived procedural wage transparency negatively affect turnover intention. Furthermore, our results are in line with the meta-studies of Cohen-Charash & Spector (2001) and Li and Bagger (2012), which state that procedural justice is associated with lower turnover intention.

Our second hypothesis, which predicted that perceived distributive wage transparency has no significant effect on turnover intention, was also supported by our analysis. We found no economic or statistically significant effect of perceived distributive wage transparency on turnover intention. This result is not unusual and can best be explained by the contradictory results found in the literature, based on whether the company has introduced a less dispersed wage structure or a high dispersed wage structure (Bloom & Michel, 2002; Shaw et al., 2002).

Our third and last hypothesis which predicted that, given high perceived wage dispersion, perceived distributive wage transparency has a positive effect on turnover intention, was supported by our analysis as well. Put differently, the effect of perceived distributive wage transparency on turnover intention was only significant when controlling for an interaction of perceived distributive wage transparency and perceived wage dispersion. More precisely, in a setting of high wage dispersion, we found a positive effect of perceived distributive wage transparency on turnover intention and vice versa in a setting of low wage dispersion. We argue that perceived distributive wage transparency is not necessarily beneficial for organizations, because it depends on whether the information received is of positive or negative nature for the employee. One can imagine that an employee with a relatively low income would feel undervalued in a company with a high dispersed wage structure. In contrast, an employee with a relative high income might rate the information as positive, because he or she feels appreciated by the company. Thus, this reduces or even offsets the negative effect of perceived advantageous inequality. This argumentation is in line with the fair wage hypothesis and the assumption of reciprocity (Akerlof & Yellen, 1990).

Theoretical and practical implications

Our results are in line with previous studies that examined the effect of procedural justice on turnover intention (Cohen-Charash & Spector, 2001; Li & Bagger, 2012), as well as with studies thatexamined the effect of distributive justice on turnover intention (Bloom & Michel, 2002; Cohen-Charash & Spector, 2001; Shaw et al., 2002). However, our study contributes to the existing literature of procedural justice by transferring the concepts of distributive and procedural justice to perceived transparency of wages. We were able to show that perceived procedural wage transparency and perceived distributive wage transparency (when including perceived wage dispersion as a moderator) had a significant effect on turnover intention and thus seem to be valid predictors of turnover intention. Additionally, the distinction of procedural and distributive aspects of wage transparency enables a more detailed examination of wage transparency. Furthermore, it provides a possibility for researchers to generate a more comprehensive model of wage transparency.

Because research was able to show that turnover intention is the strongest predictor of actual turnover (Carsten & Spector, 1987; Mobley et al., 1978; Tett & Meyer, 1993), we propose some practical implications that will assist organizations in reducing turnover intention.

For perceived procedural wage transparency, the implication is straight forward. Namely, companies need to communicate their wage setting process in a simple and understandable way and disclose necessary/ relevant criteria which influence the wage. The implications of perceived distributive wage transparency differ, depending on the level of perceived wage dispersion. That means companies need to evaluate whether their employees perceive wage dispersion to be high or low, in order to know which level of perceived distributive wage transparency minimizes turnover intention. Our findings imply that companies with low wage dispersion should clearly communicate their low spread of wages in order to reduce turnover intention. Not communicating the low wage dispersion could lead to a perception of low distributive wage transparency and consequently increase turnover intention. In a company with a high wage dispersion structure, however, to reduce turnover intention it is favorable to have a low level of perceived distributive wage transparency. If the employees do not know about the unpleasantly high wage dispersion, they will not show a reaction (in the form of turnover intention).

Limitations and Suggestions for Future Research

As any other study, our study has limitations. First, the data sample comprises only employees in the German- and French-speaking part of Switzerland. Hence, our result may not be generalizable to other cultures or countries. To reach more generalizable results, future research should aim to replicate our results in other countries or cross-cultural studies.

Second, the independent and dependent variables in our study were obtained through one self-report survey, which raises the isssue of a potential common method bias. The common method bias, or to be more precisely the common method variance, describes a phenomena of biased results. The issue occurs when measuring different variables (e.g., the dependent and independent) with the same method, often in form of a self-report survey (Spector, 2006). Our data sample fulfils the preconditions for a potential common method variance, so we have to be cautious about this problem. There are numerous effects that can cause a common method bias. In this study, the effect induced by the issue of social desirability is also of interest (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The issue describes that answers given by the respondents tend to be in a social desirable way (Moorman & Podsakoff, 1992). The variables turnover intention, perceived procedural and distributive wage transparency are potentially affected by this issue. The consequences for our data could be that they are biased in the favorable direction. This means that respondents could have reported lower turnover intention and higher distributive and procedural wage transparency than they actually perceive. Third, our study is based on a cross-sectional survey, and the data were collected at a single point in time. This issue is an additional factor affecting the problem of common method variance and further limitating the possibility to run causal inferences, that is, we cannot make definite predictions about the causality (Rindfleisch, Malter, Ganesan, & Moorman, 2008). However, the direction of our argument is in line with other literature concering turnover intention (Firth et al., 2004; Hellman, 1997; Tett & Meyer, 1993), which examine predictors of turnover intention, and thus, treat turnover intention as the independent variable.

Finally, measuring turnover intention rather than the actual turnover decision might affect the external validity of our findings. One could argue that only the actual turnover, which can be measured and furthermore can be directly linked to costs (Cascio, 1991), is appropriate for a comparison with other studies. However, research has been able to show that turnover intention is the strongest predictor of actual turnover (Carsten & Spector, 1987; Mobley, Horner, & Hollingsworth, 1978; Tett & Meyer, 1993). With regards to this study results, turnover intention can be acknowledged as a major issue for organisations, and thus external validity is given.

Future research should also consider other aspects, such as firm size and time passed since the last wage negotiation. Processes and attitudes of employees in small firms are likely to be different from those in large companies. Thus, additional insights could be gained by controlling for firm-size. Including the time past since the last wage negotiation could provide evidence whether the effect of perceived procedural wage transparency declines over time.

Conclusion

Overall, our study revealed that perceived procedural wage transparency, as well as perceived distributive wage transparency, influence turnover intention. With regards to perceived procedural wage transparency, we find a negative relationship between perceived procedural wage transparency and turnover intention. Perceived distributive wage transparency, however, did not significantly correlate with turnover intention. By including our moderator wage dispersion, our analyses confirm a significant relationship between perceived distributive wage transparency and turnover intention. More precisely, we find a negative relationship between perceived distributive wage transparency and turnover intention in a setting of low perceived wage dispersion, and a positive relationship between perceived distributive wage transparency and turnover intention in a setting of high perceived wage dispersion. In practice, these findings imply that companies should provide wage setting processes that are easy to understand and evaluate perceived wage dispersion and perceived distributive wage transparency simultaneously in order to lower turnover intentions.

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UNFULFILLED SALARY EXPECTATIONS AND EMPLOYEES' ATTITUDES: THE MODERATING EFFECT OF PSYCHOLOGICAL CONTRACT ORIENTATION

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Abstract: This paper describes and analyzes the consequences of unfulfilled salary expectations on intentions to quit and commitment. Furthermore, we analyze the moderating impact of employees' psychological contract orientation (relational versus transactional orientation). Based on indicators derived from psychological contract theory, affective events and social exchange theory, we derived characteristics to categorize the orientation of employees psychological contracts as transactional and relational. Results show a positive effect of unfulfilled salary expectations on intentions to quit and a negative effect on commitment. Furthermore, results revealed a moderation effect of psychological contract orientation between unfulfilled salary expectations on intentions to quit in such a way that the effect of unfulfilled salary expectations on intentions to quit are weaker for employees with a relational psychological contract compared to employees with a transactional psychological contract. The relation between unfulfilled salary expectations and commitment was not moderated by an employee's psychological contract orientation. It remains to see whether the results can be replicated and supported by alternative and possibly enhanced indicators for classifying relational and transactional orientations.

Keywords: psychological contract, commitment, intentions to quit, unfulfilled salary expectations

Introduction

“Firms estimate that the cost of hiring and training a new employee can be 1.5 times a departing worker’s salary, so reducing turnover by 200 employees could mean $30 million in savings” (Greenhouse, 2011, p.1). Training and hiring new employees lead to high personal cost (Zhao, Wayne, Glibkowski, & Bravo, 2007). Thus, every company should be aware about employees’ commitment and intentions to quit, how commitment and intentions to quit interact with each other, and what makes an employee to stay with an organization or leave the organization.

Organizational commitment is defined as the relative strength of an employees’ identification with the organization and its organizational involvement (Chiang, Cherchen, Jiang, & Klein, 2012; Meyer & Allen, 1984). This commitment gets stronger if an employee feels organizational support (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). An organization supports its employees by caring about their well-being and by endorsing the employees perception, that they will be treated fairly throughout their tenure (Griffeth, Horn, & Gaertner, 2000). Prior research showed that commitment is also influenced by demographic variables (i.e., age, organizational tenure, gender, education), individual differences (e.g., personal values) and work experiences (i.e., leadership, role ambiguity, role conflict). Further, studies showed that commitment leads to lower intentions to quit (Meyer et al., 2002; Miceli & Mulvey, 2000).

Intentions to quit reflect the probability that an employee will leave the organization within a specific time frame (Zhao et al., 2007). Earlier studies have shown that most demographic factors (e.g., age, tenure, training) are associated with higher intentions to quit while education is associated with lower intentions to quit (Griffeth et al., 2000). In addition, higher job satisfaction, pay, pay satisfaction, and high quality leadership reduce intentions to quit, however stress, alternative job opportunities and job search intentions increase intentions to quit (Griffeth et al., 2000; Shields & Ward, 2001; Wunder, Dougherty, & Welsh, 1982). Furthermore, the bigger the difference between the achieved salary and the expected salary, the higher the intentions to quit (Federico, Federico, & Lundquist, 1976). As we have seen from these findings, several factors influence commitment and intentions to quit. Hence, it is important to understand how commitment and intentions to quit affect the relationship between employers and employees.

One way to explain the relationship between employees and employers is the psychological contract (Argyris, 1960; Rousseau, 1989, 1995; Schein, 1965). The psychological contract is built on an individual's belief system of a reciprocal exchange agreement between employees and employers. This exchange agreement binds employees and employers to a set of reciprocal obligations. Such reciprocal obligations emerge through a promise made in exchange of an offered consideration (Rousseau, 1989, 1995). The extent to which an organization has not fulfilled such promises or obligations in the perception of the employee is known as the psychological contract breach (Robinson & Rousseau, 1994). Previous research on the psychological contract has indicated that contract breach leads to a lower commitment or higher intentions to quit (Chiang, Cherchen, Jiang, & Klein, 2012; Robinson & Rousseau, 1994; Zhao et al., 2007).

However, little attention has been given to the impact of isolated psychological contract components such as pay. Pay refers to all forms of compensation (i.e., salary, benefits etc.) and the emotional and affective response to pay is pay satisfaction (Bhal & Gulati, 2007). It is shown that pay satisfaction is negatively related with intentions to quit, and positively related with commitment (Brooke, 1986; Greenberg, 1987; Miceli & Mulvey, 2000; Miceli, M. P., & Lane, 1991). However, little research connecting unfulfilled salary expectations with the outcomes of the psychological contract breach (e.g., organizational commitment, intentions to quit) has been conducted. Therefore, the first research question of this paper is to examine the effects of unfulfilled salary expectations on intentions to quit and commitment.

How strong commitment or intentions to quit are affected by the contract breach is determined by the orientation of the psychological contract (Alcover, Martínez-Íñigo, & Chambel, 2012; Chiang et al., 2012; Zhao et al., 2007). The orientation of the psychological contract can be relational or transactional (Rousseau, 1989, 1995). A relational psychological contract is based on an open-ended time frame and is associated with social exchange, non-monetary benefits, and a relationship founded on trust (Millward & Hopkins, 1998; Rousseau, 1989, 1995). On the other hand, transactional psychological contracts are linked with short-term frames as well as economic and other tangible exchange (Millward & Hopkins, 1998; Rousseau, 1989, 1995).

Prior research has shown that transactional orientated contracts have a positive effect on intentions to quit (Alcover et al., 2012).

Further, a transactional contract reaction is less intense and more amenable then the reaction of a relational contract (Chiang et al., 2012; S. L. Robinson & Morrison, 1995; S. L. Robinson & Rousseau, 1994). Consequently, the orientation of the contract (transactional, relational) has an influence on the reaction of a breach of the psychological contract (Chiang et al., 2012). Therefore, we conclude that a relational versus a transactional contract lead to different reactions regarding unfulfilled salary expectations. Moreover, we propose a stronger reaction for a relational oriented contract and a weaker reaction for a transactional contract. However, there has not been found empirical evidence, which support this reaction. Thus, the second research question of this paper analyzes the effects of unfulfilled salary expectations moderated by a relational or transactional orientation on intentions to quit and commitment.

Our research is based on the Swiss Human-Relations Barometer 2008 (Grote & Staffelbach, 2008), which we will use for our empirically analysis. Our data sample is a representative sample of employees working in Switzerland. The sample utilized in this study encompasses representative data collected from the entire German and French part of Switzerland. It includes employees from a wide variety of industries aged between 16 and 65 years (Staffelbach & Grotte, 2008).

This paper investigates how unfulfilled salary expectations are connected with intentions to quit and commitment. The paper makes the following two contributions: First, it demonstrates the impact of unfulfilled salary expectations on intentions to quit and commitment. Second, it investigates whether unfulfilled salary expectations have a different impact on commitment and intentions to quit depending on the orientation of the psychological contract (relational versus transactional contract).

Theoretical Background

The Psychological Contract

The psychological contract has been developed by Argyris (1960), Levinson, Price, Munden, Mandl and Solley (1962) and Schein (1965). Rousseau (1989) used these early contributions and adapted the psychological contract to more recent developments by incorporating the individual level and shifting from expectations to obligations. The majority of recent studies are based on the understanding, that the psychological contract is an individual belief system about mutual obligations (Coyle-Shapiro & Kessler, 2000). Rousseau (1995) emphasizes that the psychological contract between employees and their organization is an important concept in order to explain the employment relationship. The psychological contract is an unwritten agreement which refers to the exchange-based relations between employees and employers and cannot be compared with the legal contract of employment (Robinson & Morrison, 1997; Rousseau, 1989, 1995). It is based on perceived obligations, which are far stronger than expectations. Employees understand these obligations as beliefs what they should receive because of the perceived promises of the employer to provide those things (Robinson, 1996). Therefore, only those expectations, which emerge through a perceived implied or an expressed promise by the employer are part of the psychological contract (Robinson, 1996). Thus, the psychological contract may differ for employees hired at the same time in the same position and one party's understanding of the contract may not be shared by the other party (Robinson & Morrison, 1997; Rousseau, 1989).

The creation of the psychological contract results from actions and events within an organization. Such interpretations of actions and events within an organization can be seen as unique beliefs of parties what they owe each other. These beliefs can arise from bonus systems discussed during the recruitment process, interpretations of past exchanges and interpretations of experiences of other employees or through factors (e.g., fairness) that they may consider for granted (Macneil, 1985). In exchange of such beliefs promises implied or stated of pay, promotion, growth or advancement can be offered. Together, these promises and these beliefs exchanged are components of the psychological contract and form the contract (S. L. Robinson & Rousseau, 1994). The extent to which an organization has not fulfilled such promises or obligations (i.e., components of the contract) in the perception of the employee is known as the psychological contract breach (Robinson & Rousseau, 1994)

Unfulfilled Salary Expectations

Pay, refering to all forms of compensation (i.e., salary, benefits etc.), is a component of the psychological contract (Robinson & Rousseau, 1994). The emotional and affective response, which is the overall negative or positive feelings that individuals have towards their pay is understood as pay satisfaction (Bhal & Gulati, 2007; Williams et al., 2006). Research has shown that pay satisfaction has an influence on turnover (Weiner, 1980). While Motowidlo (1983) stated that pay satisfaction has also an impact on intentions to quit, which, in turn, effects turnover. This is in line with Newman (1974), who reported as well that pay satisfaction has a signficant influence an intention to quit (Griffeth et al., 2000). Curral, Towler, Judge, and Kohn (2005) show in their study that pay satisfaction is negatively related to intentions to quit (Miceli, & Lane, 1991).

Also the relationship between pay satisfaction and commitment has been investigated (Brooke, 1986; Greenberg, 1987; Miceli & Mulvey, 2000). It is shown that pay satisfaction is positively related to commitment (Miceli & Mulvey, 2000). We argue that unfulfilled salary expectations might lead to similar outcomes as low job satisfaction. Therefore we derive the following hypotheses:

Hypothesis 1a: *Unfulfilled salary expectations will be positively correlated with intentions to quit.*

Hypothesis 1b: *Unfulfilled salary expectations will be negatively correlated commitment.*

Orientation of the Psychological Contract

A psychological contract can be categorize in two orientations. Macneil (1985) defined these two different contract orientations as transactional and relational. A transcational orientated contract is defined in terms of financial and material exchange and is associated with a short-term view. This contract involves also monetizable exchanges between employees and employers over a finite and often brief period of time (Robinson, Kraatz, & Rousseau, 1994). A relational orientated contract is based on a long-term view, a relationship build on trust and organizational commitment (Alcover et al., 2012). Moreover, Macneil (1985) argued, that the relational orientation involves a variety of socio-emotional exchanges (i.e., trust, beliefs in good faith, fair dealing). It is an open-ended contract, which maintains a relationship. Such contracts often include training and development opportunities and mostly have a long-term career focus (Robinson et al., 1994).

The study of Alcover and colleagues (2012) investigates the relational and transcational orientation of the psychological contract, and their influences on intentions to quit (Millward & Hopkins, 1998; Rousseau, 1995), while using affective commitment as a mediator variable in employment relations. They conclude that transactional oriented contracts have a positive influence on the intentions to quit while relational oriented contracts show negative effects. Further, they state that affective commitment is significantly associated with the relational-based orientation (Alcover et al., 2012; Millward & Hopkins, 1998). Also Chiang, Cherchen, Jiang, and Klein (2012) support this view, that intention to quit and organizational commitment is strongly connected with the individual psychological contract orientation. They reinforce that employees with a relational oriented contract have more commitment than employees with a transactional oriented contract. They emphasize that relational oriented employees tend to show a stronger negative relationship between contract breach and commitment as transactional oriented ones. This stronger negative relationship of the relational orientation leads to a stronger reaction in terms of response to the experienced contract breach.

In terms of intention to quit, the study shows that a psychological contract breach leads to higher intention to quit without any influence of the contract orientation (Chiang et al., 2012). This is in line with the findings of Alcover et al. (2012), which suggest that transactional oriented employees tend to have a positive relationship to intentions to quit while relational oriented employees have a negative relationship to intentions to quit. This suggests that transactional oriented employees show a stronger reaction on contract breach as relational oriented employees. The influence of the orientation of the psychological contract has on the magnitude on commitment and intention to quit is also supported by the research of Zhao et al. (2007). Though their result suggest that the influence of contract breach on commitment with a transactional orientation has a stronger effect than with a relational orientation (Zhao et al., 2007), which contradicts the previous studies. Arguing that relational oriented employees perceive contract breach as miscommunication or bad luck in comparison of the transactional orientation, which senses it as betrayal of their employer and react therefore stronger

(Robinson & Morrison, 1995). Additionally, it is shown that the transactional orientation has a smaller effect on intentions to quit than the relational orientation (Zhao et al., 2007).

These studies have shown that the psychological contract breach through unfulfilled salary expectations and its influence on intention to quit and on commitment can be moderated by the orientation of the psychological contract. Whether the contract is based on a transactional orientation or a relational orientation the effects (i.e., positive or negative) on its outcomes (i.e., intention to quit or commitment) will be different. Therefore, we propose that unfulfilled salary expectations will have a stronger effect on intentions to quit and commitment with a transactional orientation than with a relational orientation. Based upon the above discussion, we propose (also see Figure I):

Hypothesis 2a: *The orientation of the psychological contract moderates the relationship between unfulfilled salary expectations and intentions to quit, in such a way that unfulfilled salary expectations have a weaker impact on intentions to quit for employees with a relational contract orientation than for employees with a transactional contract orientation.*

Hypothesis 2b: *The orientation of the psychological contract moderates the relationship between unfulfilled salary expectations and commitment, in such a way that unfulfilled salary expectations have a weaker impact on intentions to quit for employees with a relational contract orientation than for employees with a transactional contract orientation .*

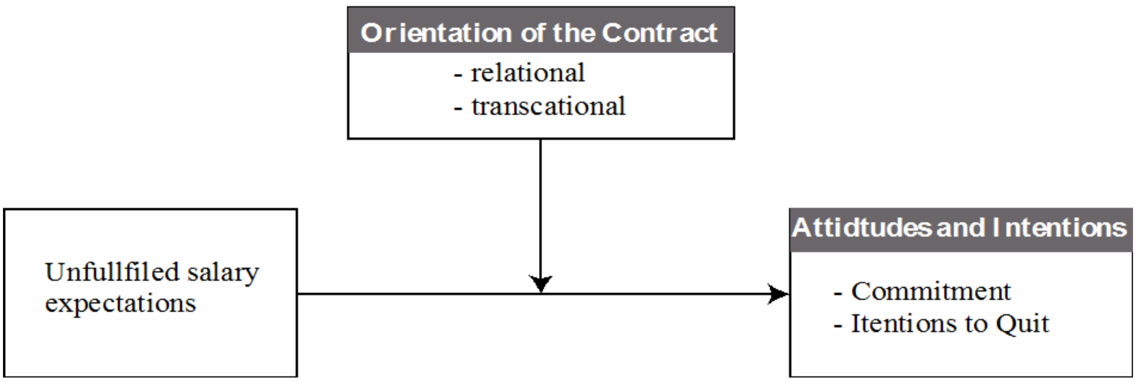

Figure I: Conceptual research model

Methods

Procedure and Sample

The data used to test the hypotheses were collected on the basis of Computer Assisted Telephone Interviews (CATI) conducted in the German- and French-speaking parts of Switzerland. For the survey a random sample of telephone numbers was drawn from all registered network entries in the German- and French-speaking part of Switzerland. Respondents included in the survey were under an employment relationship of at least 40% and aged between 16 and 65 years. Participants were contacted at home and interviewers checked whether they met the specified requirements.

The thirty interviewers mainly consisted of psychology and economics students who prior to the questioning underwent extensive preparatory training. The interviews were carried out between the beginning of May and end of June 2007. The survey yielded data from 1,370 employees. The final sample used to test the hypotheses encompassed 1,322 complete cases (cases with missing values in relevant data were removed). The retained data set comprised of 44.1% female participants. In terms of education, 48.2% finished college or a higher education. In 73.5% of the cases employees were German-speaking whereas 26.5% of the participants were French-speaking. Further, 63.2% were employed full-time. Participants were aged 44.2 years on average (SD = 10.3 years) and they maintained an average employment relationship with their current employer of 10.4 years (SD = 9.3 years). Respondents covered the full range of industries.

Measures

All measures used in this study were adopted or calculated based on items originally developed by Guest and Conway (2004). As sample size was adjusted only marginally and the metrics in use have previously been examined for their reliability and external validity, no additional pretest was carried out within the study at hand in this respect (Grote & Staffelbach, 2007). Internal validity of the constructed dependent variables has been assessed using Cronbach's alpha.

Unfulfilled salary expectations were operationalized using both, salary expectations ("Are you expecting a high salary for your work") and fulfillment of salary expectations ("Does your employer offer you a high salary for your work"). Both items were measured on a 5-point scale, ranging from 1 (not at all) to 5 (thoroughly). By subtracting the salary expectations from the received salary, one obtained an indicator scale for unfulfilled and fulfilled salary expectations ranging from -4 to 4. A value of -4 indicated a strong dissatisfaction with the current salary and a value of 4 indicated a strong satisfaction with the salary.

Intention to quit was measured using two items originally developed by (Guest & Conway, 2004). The first item comprised of four statements that indicated different levels of intentions to quit (e.g., "I have never thought of quitting this job."). Respondents were asked to choose the statement that most accurately described their current situation. The second item was "How likely is it that you will voluntarily leave this organization in the following year?" The answers were measured on a 4-point Likert scale ranging from 1 (very unlikely) to 4 (very likely). Internal consistency of the two items was verified by computing Cronbach's alpha ($\alpha = 0.73$).

Commitment was also assessed using three items elaborated by (Mayer, Allan & Smith, 1993), e.g., "I have a strong sense of belonging to this organization." All items were measured on a 5-point Likert scale ranging from 1 (not at all) to 5 (thoroughly). Cronbach's alpha of the three-item scale was 0.85.

Moderating Variables. In order to distinguish between the transactional and relational orientation of the psychological contract we used tenure, contract type and employment status as indicators. The selection of moderators was based on previous research discussed in the theory section of the paper (Chiang, Cherchen, Jiang, & Klein, 2012; Millward & Hopkins, 1998). Organizational tenure was measured in years and months and ranged from a minimum of 1 month to a maximum of 43 years. The relational orientation of the psychological contract was determined for tenure greater than 1 year (coded as 1), whereas tenure below 1 year was attributed to a transactional orientation (coded as 0). The cut off level of 1 year was fixed by the researches based on intense discussion and own experience. The contract type was modeled as dichotomous variable with an open-ended employment (coded as 1) and fixed-term employment (coded as 0). Thus the transactional orientation of the psychological contract is stated as a fixed-term employment, whereas the relational orientation is defined as an open-ended employment. As a third differentiator, employment status was used, whereby full-time employment was used to characterize a relational orientation (coded as 1) and part-time employment represented a transactional orientation (coded as 0).

Control Variables. In order to test the relative impact of unfulfilled salary expectations on intentions to quit and commitment, control variables were integrated in our model. In this study, we controlled for age (measured in years). Studies have shown that younger employees tend to show higher intentions to quit than older employees (Blomme, van Rheede, & Tromp, 2010; Carless & Arnup, 2011; Houkes, Janssen, Jonge, & Bakker, 2003; Tschopp, Grote, & Gerber, 2013). In addition, age has been found to be positively related to commitment (Hrebiniak, 1974; Lee, 1971). Furthermore, we controlled for educational background, which was measured in two categories (0 = college and below, 1 = education above college). Previous research has shown that employees with a lower educational background show lower intentions to quit in contrast to well-educated employees (Grote & Staffelbach, 2007; Henneberger & Sousa-Poza, 2007; Tschopp et al., 2013). Additionally, Steers & Koch (1978) have found that education is positively related to commitment. In order to account for cultural differences within Switzerland we also integrated language as a control variable. Further, a considerable number of studies with focus on intentions to quit (Carless & Arnup, 2011; De Cuyper, Mauno, Kinnunen, & Mäkikangas, 2011; Houkes et al., 2003; Tschopp et al., 2013) as well as commitment (Marsden, Kalleberg, & Cook, 1993) has controlled for sex differences. Although no significant empirical effect was revealed within these studies, we decided to incorporate sex as a control variable as well.

Further, we controlled for organizational tenure, job satisfaction, employment status and contract type (for moderated regressions, moderating variables were removed from the control variables as they served as moderator). Organizational tenure was measured in years and months. Prior research has revealed a positive relationship between tenure and commitment (Bal, De Lange, Jansen, & Van Der Velde, 2008; Feierabend, Mahler, & Staffelbach, 2011; Millward & Hopkins, 1998). In addition, previous research revealed, a negative relation between tenure and intentions to quit. Job satisfaction was measured with one item on a 10-point Likert scale ranging from 1 (completely unsatisfied) to 10 (completely satisfied). A positive relationship between job satisfaction and commitment (Griffeth, 2000; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002), as well as a negative relation between job satisfaction and intentions to quit (Lum, Kervin, Clark, Reid, & Sirola, 1998) has been manifested in previous research. Employment status and contract type were measured as dichotomous variables (see moderating variables).

Data Analysis

For all four hypotheses, linear regressions were estimated applying the ordinary least squares (OLS) method. To test the direct-relationship hypotheses (hypothesis 1a, 1b), we separately regressed unfulfilled salary expectations onto the dependent variables commitment and intentions to quit (while controlling for the previously stated variables). To test the moderated-relationships (hypotheses 2a - 4b), we conducted moderated regression analysis in accordance with the three-step procedure for moderation testing developed by Baron and Kenny (1986): First, we entered the control variables into the model. Subsequently, we included the main effects. Lastly, the interaction terms were integrated. In compliance with Aiken and West (1991), continuous variables were mean-centered before generating the interaction terms in order to avoid multicollinearity in the model.

Results

Table I presents the means, standard deviations and bivariate correlations of all model variables. Coefficient alpha's for computed variables appear in parentheses along the main diagonal.

TABLE I: Descriptive, Reliability and Correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1 Commitment	3.50	1.03										
2 Intention to quit	1.92	0.87	-.390**									
3 Unfulfilled salary expectations	-0.48	1.26	.199**	-.136**								
4 Sex[a]	0.56	0.50	.004	-.019	.045							
5 Age	44.25	10.26	.072**	-.192**	.009	.038						
6 Language[b]	0.73	0.44	.082**	.078**	.057*	.055*	-.056*					
7 Education[c]	0.48	0.50	.014	.087**	.054	.113**	-.022	-.002				
8 Job satisfaction	7.34	1.66	.505**	-.463**	.217**	.025	.091**	.013	.027			
9 Tenure[d]	10.37	9.26	.154**	-.166**	-.01	.100**	.518**	-.122**	-.084**	.085**		
10 Contract type[e]	0.92	0.28	.054*	-.094**	-.034	.042	.138**	.079**	-.038	.017	.152**	
11 Employment status[f]	0.63	0.48	-.009	.005	.004	.516**	-.083**	-.022	.037	.026	.067*	.015

Notes: N = 1322 for all variables

[a]0=female, 1=male, [b]0=French, 1=German, [c]0=low education level, 1=high education level, [d]0=tenure < 1, 1=tenure ≥1, [e]0=full-time, 1=part-time, [f]0=part-time, 1=full-time

*p<.05, **p<.01.

Hypothesis 1a forecasted a negative relationship between unfulfilled salary expectations and commitment. As the results in Table II show, regression analysis revealed a statistically significant and positive effect of unfulfilled salary expectations on commitment (β = .094, p < .001). The findings provide support for hypotheses 1a. The predictor explained an additional 0.8% of the variance in commitment. Further, job satisfaction (β = .482, p < .001) and tenure (β = .053, p < .1) have a statistical significant influence on commitment. Hence, high values for job satisfaction and tenure strengthen commitment.

TABLE II: Regression Analysis Report of Commitment		
	Commitment	
Variables	β Step 1	β Step 2
Controls		
Sex[a]	-0.005	-0.01
Age	0.017	0.017
Language[b]	0.075**	0.07**
Education[c]	0.004	0
Tenure	0.05*	0.053*
Contract type	0.028	0.032
Employment status	-0.016	-0.014
Job satisfaction	0.502***	0.482***
Predictors		
Unfulfilled salary expectations		0.094***
Adjusted R^2	0.262	0.27
ΔR^2		0.008
ΔF		15.185***

Notes: N = 1322 for all variables, standardized coefficients are reported

[a] *0=female, 1=male,* [b] *0=French, 1=German,* [c] *0=low education level, 1=high education level*

* *p* < .05, ** *p* < .01, *** *p* < .001.

[a] *0=female, 1=male,* [b] *0=French, 1=German,* [c] *0=low education level, 1=high education level*

* *p* < .05, ** *p* < .01, *** *p* < .001.

Hypothesis 1b predicted that unfulfilled salary expectations are positively related to intentions to quit. The conducted regression analysis yielded a statistically significant coefficient for unfulfilled salary expectations (β = -0.047, p < .05). The findings support H1b. As Table III discloses, the predictor explains an additional 0.5% of the total variance in intentions to quit. The F-Statistic indicates that this is a significant increase (ΔF = 9.632, p < .05). In addition to the predictor, age (β = -0.143, p < .001) language (β = .078 p < .001), education (β

= .079, p < .001) and job satisfaction (β = -0.443, p < .001) have a statistically significant influence. While increasing age and job satisfaction have a weakening effect on the intentions to quit, a high educational background and a German language background enhance the intentions to quit.

TABLE III: Regression Analysis Report of Intention to quit		
	Intention to quit	
Variables	β Step 1	β Step 2
Controls		
Sex[a]	-0.021	-0.019
Age	-0.143***	-0.143***
Language[b]	0.084***	0.087***
Education[c]	0.095***	0.097***
Tenure	0.07**	0.068**
Contract type	-0.083**	-0.084**
Employment status	0.015	0.014
Job satisfaction	-0.453***	-0.443***
Predictors		
Unfulfilled salary expectations		-0.047
Adjusted R^2	0.249	0.253
ΔR^2	-	0.005
ΔF	-	9.632*

Notes: N = 1322 for all variables, standardized coefficients are reported

[a] *0=female, 1=male,* [b] *0=French, 1=German,* [c] *0=low education level, 1=high education level*

* $p < .05$, ** $p < .01$, *** $p < .001$.

Hypothesis 2a investigated the moderating effect of the orientation of the psychological contract on the relationship between unfulfilled salary expectations and intentions to quit. First, tenure was used to categorize the orientation of the psychological contract. The interaction term did not reveal any statistical significance (Table IV). As the orientation of the psychological contract (operationalized by tenure) explained no additional variance in intentions to quit, Hypothesis 2a was not supported.

TABLE IV: Results of moderated (tenure) Regression Analysis on intentions to quit			
		Intention to quit	
Variables	β Step 1	β Step 2	β Step 3
Controls			
Sex[a]	-0.024	-0.019	-0.019
Age	-0.132***	-0.143***	-0.143***
Language[b]	0.084***	0.087***	0.087***
Education[c]	0.095***	0.097***	0.097***
Contract Type[e]	-0.07**	-0.084**	-0.084**
Employment Status[f]	0.018	0.014	0.014
Job satisfaction	-0.453***	-0.443***	-0.443***
Predictors			
Unfulfilled salary expectations		-0.047*	-0.059
relational orientation (tenure)		0.068**	0.068**
Moderation			
Unfulfilled salary expectations * relational orientation (tenure)			0.012
Adjusted R^2	0.253	0.259	0.258
ΔR^2 Change		0.007	0
ΔF		6.014**	0.025

Notes: N = 1322 for all variables, standardized coefficients are reported

[a] 0=female, 1=male, [b] 0=French, 1=German, [c] 0=low education level, 1=high education level

[e] 0=fixed-term, 1=open-ended, [f] 0=part-time, 1=full-time

* *p* < .1, ** *p* < .01, *** *p* < .001.

Second, contract type was used to categorize the orientation of the psychological contract. Statistical results shown in Table V indicate a positive and statistically significant effect of the moderation variable (β = 0.161, p < .1). The interaction term explains an additional 0.2% of the variance in intentions to quit. The F-Statistic proposes that this is a weak significant increase in variance explained (ΔF = 3.229, p < .1). Hence, by using contract type to operationalize the orientation of the psychological contract, hypothesis 2a is supported by the findings.

TABLE V: Results of moderated (contract type) Regression Analysis on intentions to quit			
	Intention to quit		
Variables	β Step 1	β Step 2	β Step 3
Controls			
Sex[a]	-0.024	-0.019	-0.019
Age	-0.152***	-0.143***	-0.142***
Language[b]	0.077**	0.087***	0.086***
Education[c]	0.098***	0.097***	0.099***
Tenure[e]	0.056*	0.068**	0.068**
Employment Status[f]	0.014	0.014	0.013
Job satisfaction	-0.453***	-0.443***	-0.442***
Predictors			
Unfulfilled salary expectations		-0.047*	-0.203*
relational orientation (contract type)		-0.084**	-0.089***
Moderation			
Unfulfilled salary expectations * relational orientation (contract type)			0.161*
Adjusted R^2	0.251	0.259	0.26
ΔR^2 Change		0.009	0.002
ΔF		7.611**	3.229*

Notes: N = 1322 for all variables, standardized coefficients are reported

[a] *0=female, 1=male,* [b] *0=French, 1=German,* [c] *0=low education level, 1=high education level*

[e] *0=low, 1=high,* [f] *0=part-time, 1=full-time*

* $p < .1$, ** $p < .01$, *** $p < .001$.

The interaction effect illustrated in Figure II reveals that the relational orientation of the psychological contract (measured by contract type) weakens the effect of unfulfilled salary expectations on intentions to quit.

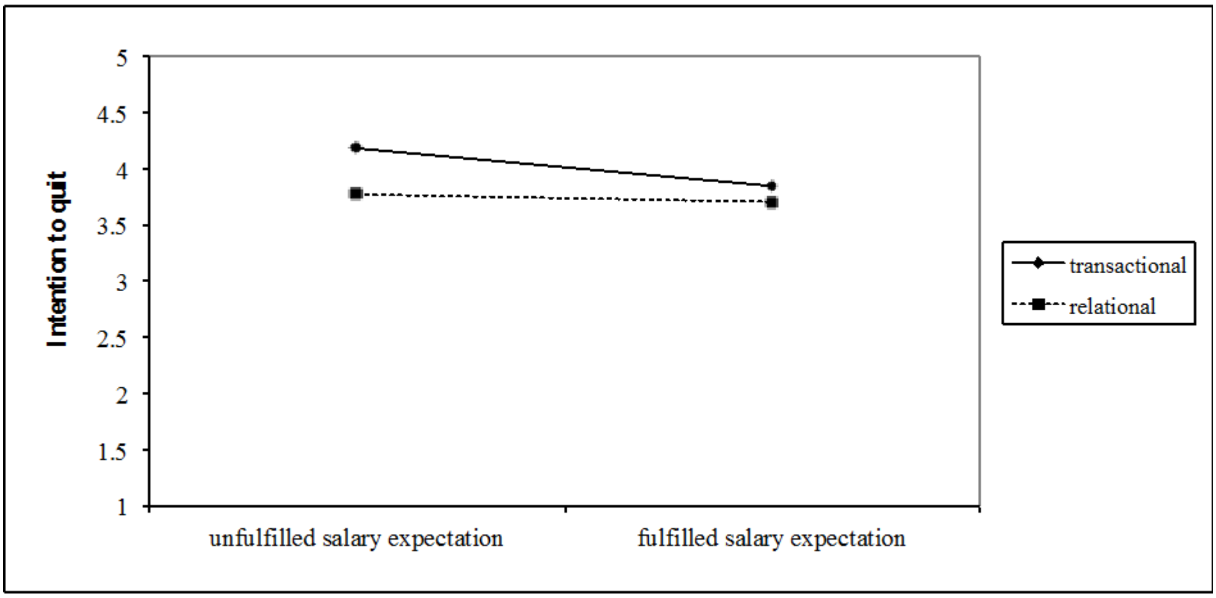

Figure II: Interaction Effect of contract type and unfulfilled salary expectations

Third, employment status was used to categorize the orientation of the psychological contract. Statistical results shown in Table VI indicate a statistically insignificant effect of the moderation variable ($\beta = 0.057$, $p = .119$). Hence, by using employment status to operationalize the orientation of the psychological contract, hypothesis 2a is not supported by the findings.

TABLE VI: Results of moderated (employment status) Regression Analysis on intentions to quit			
	Intention to quit		
Variables	β Step 1	β Step 2	β Step 3
Controls			
Sex[a]	-0.013	-0.019	-0.02
Age	-0.145***	-0.143***	-0.142***
Language[b]	0.083***	0.087***	0.087***
Education[c]	0.094***	0.097***	0.099***
Tenure[e]	0.071**	0.068**	0.07**
Contract Type[f]	-0.083**	-0.084**	-0.086***
Job satisfaction	-0.453***	-0.443***	-0.443***
Predictors			
Unfulfilled salary expectations		-0.047*	-0.09*
relational orientation (employment status)		0.014	0.015
Moderation			
Unfulfilled salary expectations * relational orientation (employment status)			0.057
Adjusted R^2	0.258	0.259	0.26
ΔR^2 Change		0.002	0.001
ΔF		2.03	2.432

Notes: N = 1322 for all variables, standardized coefficients are reported

[a] 0=female, 1=male, [b] 0=French, 1=German, [c] 0=low education level, 1=high education level

[e] 0=low, 1=high, [f] 0=fixed-term, 1=open-ended

* $p < .1$, ** $p < .01$, *** $p < .001$.

Hypothesis 2b investigated the moderating effect of the orientation of the psychological contract on the relationship between unfulfilled salary expectations and commitment. First, tenure was used to categorize the orientation of the psychological contract. The results of the moderated regression analysis shown in Table VII indicate a non-significant effect of the moderation operationalized based on tenure ($\Delta F = 0.111$, $p = .739$).

TABLE VII: Results of moderated (tenure) Regression Analysis on commitment			
		Commitment	
Variables	β Step 1	β Step 2	β Step 3
Controls			
Sex[a]	-0.008	-0.01	-0.01
Age	0.025	0.017	0.017
Language[b]	0.074**	0.07**	0.069**
Education[c]	0.004	0	0
Contract Type[e]	0.037	0.032	0.032
Employment Status[f]	-0.015	-0.014	-0.014
Job satisfaction	0.502***	0.482***	0.482***
Predictors			
Unfulfilled salary expectations		0.094***	0.07
relational orientation (tenure)		0.053*	0.052*
Moderation			
Unfulfilled salary expectations * relational orientation (tenure)			0.026
Adjusted R^2	0.26	0.27	0.269
ΔR^2 Change		0.01	0.001
ΔF		9.68***	0.111

Notes: N = 1322 for all variables, standardized coefficients are reported

[a] *0=female, 1=male,* [b] *0=French, 1=German,* [c] *0=low education level, 1=high education level*

[e] *0=fixed-term, 1=open-ended,* [f] *0=part-time, 1=full-time*

* $p < .1$, ** $p < .01$, *** $p < .001$.

Second, contract type was used to categorize the orientation of the psychological contract. Table VIII shows the results of the moderated regression analysis. The results reveal a non-significant effect of the moderation operationalized based on contract type (ΔF = 2.222, p= .136).

TABLE VIII: Results of moderated (contract type) Regression Analysis on commitment			
		Commitment	
Variables	β Step 1	β Step 2	β Step 3
Controls			
Sex[a]	-0.004	-0.01	-0.009
Age	0.02	0.017	0.017
Language[b]	0.077**	0.07**	0.07**
Education[c]	0.003	0	-0.002
Contract Type[e]	0.055*	0.053*	0.054*
Employment Status[f]	-0.016	-0.014	-0.013
Job satisfaction	0.502***	0.482***	0.481***
Predictors			
Unfulfilled salary expectations		0.094***	0.222*
relational orientation (contract type)		0.032	0.035
Moderation			
Unfulfilled salary expectations * relational orientation (contract type)			-0.132
Adjusted R^2	0.261	0.27	0.27
ΔR^2 Change		0.009	0.002
ΔF		8.284***	2.222

Notes: N = 1322 for all variables, standardized coefficients are reported

[a] *0=female, 1=male,* [b] *0=French, 1=German,* [c] *0=low education level, 1=high education level*

[e] *0=low, 1=high,* [f] *0=part-time, 1=full-time*

* $p < .1$, ** $p < .01$, *** $p < .001$.

Third, contract type was used to categorize the orientation of the psychological contract. The results of the moderated regression analysis are shown in Table IX. Again, no statistically significant effect was detected while using employment status as moderating variable between the unfulfilled salary expectations and commitment (β = -0.012, p = 0.741).

TABLE IX: Results of moderated (employment status) Regression Analysis on commitment			
	Commitment		
Variables	β Step 1	β Step 2	β Step 3
Controls			
Sex[a]	-0.014	-0.01	-0.009
Age	0.019	0.017	0.017
Language[b]	0.076**	0.07**	0.07**
Education[c]	0.004	0	-0.001
Contract Type[e]	0.049*	0.053*	0.053*
Employment Status[f]	0.028	0.032	0.032
Job satisfaction	0.502***	0.482***	0.482***
Predictors			
Unfulfilled salary expectations		0.094***	0.103**
relational orientation (employment status)		-0.014	-0.014
Moderation			
Unfulfilled salary expectations * relational orientation (employment status)			-0.012
Adjusted R^2	0.262	0.27	0.269
ΔR^2 Change		0.008	0.001
ΔF		7.768***	0.109

Notes: N = 1322 for all variables, standardized coefficients are reported

[a] *0=female, 1=male,* [b] *0=French, 1=German,* [c] *0=low education level, 1=high education level*

[e] *0=low, 1=high,* [f] *0=fixed-term, 1=open-ended*

* $p < .1$, ** $p < .01$, *** $p < .001$.

Discussion

This article investigated whether and under what conditions unfulfilled salary expectations affect employees’ commitment and intention to quit. On the one hand, we examined the direct relationship between unfulfilled salary expectations and their influence on commitment and intentions to quit. On the other hand, we investigated whether or not a relational orientation of the psychological contract weakens the relationship between unfulfilled salary expectations and commitment respectively intentions to quit. By implication, we also explored whether or not the transactional orientation of the psychological contract strengthens the relationship between unfulfilled salary expectations and commitment respectively intentions to quit.

Our results showed that employee’s whose salary expectations were not fulfilled showed higher intentions to quit and a lower organizational commitment compared to employee’s whose salary expectations were met. The relationship between unfulfilled salary expectations and commitment was not strengthened nor weakened by the varying orientations of the psychological contract. However, the orientation of the psychological contract showed a moderating effect on the relationship between unfulfilled salary expectations and intentions to quit. Unfulfilled salary expectations proved to have a stronger influence on intentions to quit for employees with a transactional orientation of the psychological contract compared to those with a relational contract.

Employees whose salary expectations are not fulfilled reveal lower organizational commitment. The pattern of the results is highly consistent with empirical findings (Chiang et al., 2012; Zhao et al., 2007) and is supported by the psychological contract (Rousseau, 1989, 1995), affective events (Weiss & Cropanzano, 1996) and social exchange theory (Homans, 1958). Employees encounter unfulfilled salary expectations whenever they perceive their dedicated efforts as undervalued. This situation causes a sense of lack of appreciation and esteem by the employer, which may translate into frustration, demotivation and eventually causes decrease in organizational commitment. Similarly, the observed positive relationship between unfulfilled salary expectation and intentions to quit can be explained. As demotivation and frustration increase as a result of unfulfilled salary expectations, the dissatisfaction with the current job situation increases and eventually peaks in the termination of the employment relationship. Again, this observation is in accordance with previous research findings (Chiang et al., 2012; Zhao et al., 2007) and the previously mentioned underlying theories.

The orientation of the psychological contract neither strengthens nor weakens the effect of unfulfilled salary expectations on commitment (irrespective of the operationalization of psychological contract orientation). This means that the impact of unfulfilled salary expectations on commitment is similar for transactional and relational oriented employees and does not change as the difference between expected and received salaries increases.

However, this study shows that the effect of unfulfilled salary expectations on intentions to quit is moderated by the orientation of the psychological contract (relational versus transactional orientation). The type of contract associated with employees changes the strength of the relation between unfulfilled salary expectations and intentions to quit in such a way, that for employees with a relational orientation, unfulfilled salary expectations have a weaker impact on intentions to quit compared to employees with a transactional orientation. It can be argued that transaction oriented employees are mainly interested in monetary incentives and thus want to leave their employer as soon as their salary expectations are not or no longer fulfilled.

As quitting the job can resolve the issue of unfulfilled salary expectation, this seems a viable option for employees.

Implications for Theory and Research

The present study provides evidence regarding a fundamental issue: a breach of the psychological contract caused by unfulfilled salary expectations leads to higher intentions to quit and lower organizational commitment. Moreover, by offering evidence on the effect of unfulfilled salary expectation on intention to quit and commitment, this study affirms a seldom-tested assumtpions in psychological contract theory.

Our findings contribute to the ongoing conversations about the psychological contract and also the type of contracts (Alcover et al., 2012; Chiang et al., 2012; Millward & Hopkins, 1998). The evidence of this study suggests that the relationship between unfulfilled salary expectations and intentions to quit are moderated by the underliyng orientation of psychological contract. Hence, the results of this study underline the importance of the concept of the psychological contract and in particular its differentiation into transaction and relational orientation. Thus, researchers should account for the orientation of the psychological contract, when investigating workplace related issues.

Implications for Practice

First, our findings underline the importance of expectation management at the workplace. As transparent communication and active expectation management can proactively prevent un-satisfied salary expectations and thus reduce turnover rate and subsequently economize on fluctuation costs. Furthermore, managers and supervisors need to be aware that unfulfilled salary expectations are closely related to an employee's commitment. Therefore, it is again advisable to openly communicate with employees and be aware of their level of salary satis-faction respectively dissatisfaction. Again, active expectation management helps managers avoiding deviant workplace behavior such as shirking. The findings imply to taking the issue of unfulfilled salary expectations very seriously, as the consequences such as high intentions to quit and lack of commitment might have an enormous impact on a company’s success.

Furthermore, the findings suggest several courses of action for practitioners and superiors in particular. First and foremost, employers need to understand the underlying concept of psychological contracts. In particular, managers and superiors need to be aware that transactional and relational orientations of the psychological contract exist, in order to successfully manage human resources. Moreover, practitioners need to be aware that, given the different nature of their motivation, employees react differently to unfulfilled salary expectations. Whereas relational oriented employees are more loyal and focus less on extrinsic incentives, transactional oriented employees place great emphasis on monetary incentives. Thus, transaction-oriented employees have a higher tendency to quit their jobs when salary expectations are not fulfilled.

Limitations

A number of important limitations need to be considered. First, the sample was nationally representative but would tend to miss workplace behavior outside of Switzerland. Thus, the generalizability of the study might be limited to the Swiss employment market. Second, the study did not take into consideration potentially important control variables, such as career possibilities and supervisor behavior. Accounting for additional influence factors would possibly increase and refine the predictive power of the tested model. Third, and possibly the main weakness of the study was the operationalization of the orientation of psychological contracts. As there was no standardized measurement item for the determination of the orientation, the operationalization was conducted on three different levels. Regarded in isolation, none of them could accurately depict the combined attributes of a relational, respectively transactional contract. However, the operationalization deployed, even though not perfectly representative for the orientation of a psychological contract, comprised of distinctive features derived from previous research.

Future Research

This research has thrown up many questions in need for further investigation. First, an important issue is the operationalization of the orientation of the psychological contract. While tenure, contract type and employment status might be good indicators to determine the orientation of a psychological contract, their isolated consideration falls short of a satisfactory measurement. In order to further investigate the effects of the transactional and relational distinction, future research needs to establish a more sophisticated and preferably standardized measurement item for the orientation of psychological contracts. The latter is of particular importance with regards to replication and thus validation and potential generalization of previous findings.

Also, future research must not only investigate the outcomes of unfulfilled salary expectations, but also potential causes and circumstances thereof. Conceivable with this regard would be the examination of absolute and relative income and its effects on salary expectations. Moreover, the cohesion with incentive systems or board remunerations could be investigated in this context. Third, additional circumstances and influential factors leading to the breach of psychological contract must be assessed. In addition, employees' organizational role (e.g., network position, informal social netowork in the organization, relationship to board members, Human Resource Management) might have an impact. Besides, prospective research can select moderations that influence the effect on unfulfilled salary expectations on commitment.

Conclusions

This research underlined the influence of unfulfilled salary expectations on commitment and intentions to quit. As the level of unfulfilled salary expectations increases, commitment declines and intentions to quit increase. The findings showed the critical role of salary expectations and the associated reactions of employees if expectations are not met. As commitment and intentions to quit are essential determinants of corporate success, expectation management becomes a critical factor. Furthermore, unfulfilled salary expectations lead to a breach of the psychological contract. As psychological contracts take on different orientations, the consequences of unfulfilled salary expectations may vary across employees. The orientation of the psychological contracts moderates the relationship between unfulfilled salary expectations and intentions to quit in such a way that the transactional orientation increases the effect on intentions to quit. The effect of unfulfilled salary expectations on commitment is not moderated by the different orientations of the psychological contract.

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DIFFERENT PAY ELEMENTS AND PAY SATISFACTION: THE MODERATING EFFECT OF GENDER

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Abstract: Pay satisfaction is of primary importance for employees as well as for employers. At least since the 1960, pay satisfaction is generally accepted as a necessary but not sufficient condition in order to achieve companies' goals of their compensation systems such as employee retention and motivation. The purpose of this study was to determine the effects of different pay elements, namely pay level, variable pay and benefits, on pay satisfaction. A second purpose was to examine whether gender has a moderating effect on this relationship. Our aim was to expand the existing literature with our paper in an empirical and theoretical way. We enriched the existing research by differentiating between the different pay components instead of looking at the effect of the pay package as a whole on pay satisfaction. We argued that all three pay elements have a positive effect on pay satisfaction. On the other hand, we only expected to find a moderating effect of gender for pay level and benefits. Our study uses cross-sectional data from 1,326 employees in the German- and French-speaking parts of Switzerland. The empirical analysis showed that pay level and satisfaction with benefits have a significant positive effect on pay satisfaction. However, offering variable pay has no significant positive effect on pay satisfaction, as it is often claimed in the existing literature. Our assumption that we would find a moderating effect of gender could not be confirmed. Nevertheless, our findings have important implications for human resource practitioners when they are deciding on pay package strategies for their companies.

Keywords: pay level, variable pay, benefits, pay satisfaction, gender

Introduction

Back in 1998, the Swedish singer Meja entered the charts with her song “All ‘bout the money” – but, is it really *all* about the money, and can this thought-provoking phrase be applied to pay satisfaction? Pay satisfaction is of primary importance for employees and employers for different reasons (Tang, Luna-Arocas, & Sutarso, 2005; Williams, McDaniel, & Nguyen, 2006). Such reasons are related to employee engagement and absenteeism, but also to performance, and therefore, they impact company success (Werner & Werner, 2012; Williams, McDaniel, & Nguyen, 2006). At least since 1960, pay satisfaction is generally accepted as a necessary but insufficient condition in order to achieve companies’ goals of their compensation systems like employee retention and motivation and it has consequences on employees’ motivation (Grote & Staffelbach, 2008; Williams et al., 2006). Therefore, research of the factors that have an impact on employees’ pay satisfaction is of high importance.

Recent research focused on the relationship among dimensions of pay satisfaction (e.g., Williams, McDaniel, & Ford, 2006). The findings of Heneman and Schwab (1985) are often taken as a basis in this studies. One of the most discussed antecedents of pay satisfaction is pay level. Referring to pay level, Meja’s claim is supported by Heneman and Judge (2000), as they stated that pay itself should have a direct influence on pay satisfaction, which is approved by all models of pay satisfaction. Nevertheless, the relation between pay level and pay satisfaction is low (Judge, Piccolo, Podsakoff, Shaw, & Rich, 2010). Although a multitude of factors are claimed to contribute to pay satisfaction (Dyer & Theriault, 1976), two models are approved by researchers, namely the equity model by Adams (1963) and the discrepancy model by Lawler (1971). Besides pay level, other pay related factors might have an impact on employees’ pay satisfaction.

Thereby, two important dimensions of pay are pay level and benefits (Heneman & Schwab, 1985). The latter factor benefits consists of recompenses (for example for food or transportation), amenities for products and goods, employee welfare programs and recreation as well as pensions or insurance coverage (Igalens & Roussel, 1999). The two dimensions pay level and benefits are also known as components of pay packages (Igalens & Roussel, 1999). A third important component of such pay packages is variable pay (Igalens & Roussel, 1999). So far, however, variable pay is hardly linked to pay satisfaction. Our study will focus on the different pay elements pay level, variable pay and benefits by answering the first research question: *What is the relative impact of the pay level, variable pay and benefits on employees' pay satisfaction?*

While previous empirical research often does not consider gender differences, our empirical investigation will do so. Not only are women nowadays becoming more numerous in the work force (Sousa-Poza & Sousa-Poza, 2000), also the so-called "paradox of the contented female worker" (Crosby, 1982) needs to be considered. This paradox describes the finding that pay satisfaction is equivalent or higher for women than for their male counterparts, albeit women mostly earn less than their male peers (Crosby, 1982; Graham & Welbourne, 1999; Major & Konar, 1984; Sauser & York, 1978). In other words, even though a significant wage gap for men and women is acknowledged (De Gieter, Hofmans, De Cooman, & Pepermans, 2009; Keaveny & Inderrieden, 2000), women are not less satisfied with pay than men (Crosby, 1982). A gender-specific investigation seems particularly interesting, because Sousa-Poza and Sousa-Poza (2007) identified a job satisfaction differential in women's favor for Switzerland, which is only reported for a few more countries such as the United States and Great Britain. This paper expands the literature empirically and theoretically way by answering the second research question: *Does gender moderate the relationship between pay level, variable pay and benefits and employees' pay satisfaction?*

Considering the empirical research setting, it is to note that most of the cited studies have been conducted in the United States. By analyzing data from a survey on pay satisfaction in Swiss companies in 2008, our study widens this one-sidedness. Furthermore, this study evaluates representative data from employees working in different industries, which enables us to gain highly generalizable results.

The paper at hand is structured as followed: First, the theoretical background of the impacts of pay level, variable pay and benefits on pay satisfaction is summarized. In a second step, related gender differences are explained. Thereby, we transfer the findings of previous research to our research interest and generate our hypotheses. Research settings and data are clarified in the method, followed by the results, which are analyzed with multiple hierarchical regressions. In an extensive discussion, the main findings and present limitations are discussed and further research opportunities are highlighted.

Theoretical Background and Hypotheses

Pay elements and pay satisfaction

Our theoretical starting point is the multidimensional conceptual framework of pay satisfaction as noted by Heneman and Schwab (1985). Before Heneman and Schwab (1985), most concepts and measures of pay satisfaction have been one dimensional in nature. Heneman and Schwab (1985) have suggested that this broad one-dimensional definition of pay satisfaction should be replaced by a multidimensional conceptualization of pay satisfaction.

Heneman and Schwab (1985) defined the following dimensions of compensation satisfaction: Satisfaction with pay level, benefits, pay raises, pay structure and pay administration. Pay level refers to the individual's current direct compensation, such as wage or salary. Benefits reflect indirect pay to the individual, for example payment for time not worked, insurance, or pensions. Pay raises correspond to the individual's change in pay level. Pay structure and administration refer to the hierarchical relationships created among pay rates for different jobs within the organization and procedures by which the pay system is administered (Heneman & Schwab, 1985).

Furthermore, Heneman and Schwab (1985) argued that organizations often have separate policies and practices that apply to each dimension; therefore, they are administratively independent. The results of their study provide strong support for the dimensions pay level and benefits (Heneman & Schwab, 1985). The data suggested that employees develop independent affective reactions about their pay level and benefits, which are not comparable with each other. This means that the satisfaction with pay level provides little information for the satisfaction with benefits and the other way around (Heneman & Schwab, 1985).

Although there is substantial heterogeneity in pay practices across firms and industries, for our study, we define a pay package including three basic elements: pay level, variable pay and benefits. Structuring the pay package like this is in line with the total compensation package proposed by Igalens and Roussel (1999). According to the authors, the three categories offer the possibility to implement different human resource management objectives and to achieve them (Igalens & Roussel, 1999).

As the name implies, guaranteed pay refers to a fixed and guaranteed amount and payment, such as the absolute wage or base pay, seniority bonuses or a 13th month payment (Igalens & Roussel, 1999). As indicated, such an absolute wage level may vary dependent on individual skills, level of experience of employees or tenure. In this paper, guaranteed pay is referred to as pay level.

In their study, Igalens and Roussel (1999) label the second component as variable pay. We adopt their definition of variable pay, namely: "Variable pay is compensation in which the amount is variable and/or its distribution is uncertain (gain-sharing, bonuses, incentives, goal-based pay, overtime, etc.)" (Igalens & Roussel, 1999, p. 1005). Variable pay, also known as pay-for-performance, is used to recognize and reward employee contribution above and beyond their normal job requirements. On the other side, we do not include deferred pay into our pay package, because the structure of our data set does not allow for examination of deferred pay.

Benefits include recompenses for different expenditures such as food or transportation, and discounts for goods and services as well as perquisites (Igalens & Roussel, 1999). Furthermore, benefits refer to employee welfare programs, recreation options and pension plans and health insurance coverage offered to the employees (Igalens & Roussel, 1999).

Pay level and pay satisfaction

In a first step, we examine the impact of pay level on employees' pay satisfaction. Several studies found that other things being equal, pay level is a good predictor of pay satisfaction (Lawler & Porter, 1966, Dyer & Theriault, 1976; Wallace & Schwab Donald P., 1974). In addition, Sweeney, McFarlin and Inderrieden (1990), while using relative deprivation theory, showed that pay level significantly affects pay satisfaction. The authors demonstrated that those with higher pay level are on the average more satisfied than those with lower pay level (Sweeney, McFarlin, & Inderrieden, 1990). Therefore, we also expect to find a significantly positive effect of pay level on pay satisfaction.

> ***Hypothesis 1:*** *Employees' pay level has a positive impact on employees' pay satisfaction.*

Variable pay and pay satisfaction

In a next step, we examine the impact of offering variable pay (or pay-for-performance) on employees' pay satisfaction. Variable pay subsumes many different types of compensation systems, for example bonuses or gain sharing. The defining feature is that rewards must be re-earned each period (Kuhn & Yockey, 2003). When faced with the classical agency problem, reward mechanisms are designed in such a way that induces employees to act in their employers' best interests (McCausland, Pouliakas, & Theodossiou, 2005). In the case that monitoring effort is costly and imperfect, Mirrless (1976) and Hölmstrom (1979) demonstrated the theoretical dominance of pay-for-performance over alternative reward systems.

In another study, Kuhn and Yockey (2003) examined the psychology underlying reactions to variable pay by using experimentally manipulated factors based on a behavioural decision making perspective. College students who would soon enter the job market were asked to choose between a job offer with a fixed pay and one having a lower pay level but the potential to earn substantially more in total. The results showed that even though the expected values of variable pay were lower than the value of the offered fixed pay, overall, the majority of students preferred the riskier option as long as it was contingent on individual performance. Furthermore provided their results evidence that whether an incentive was contingent on individual performance or on collective performance strongly affected the pay risk preferences (Kuhn & Yockey, 2003). In contrast to Cable and Judge (1994), Kuhn and Yockey (2003) demonstrated a positive relationship between self-confidence and attraction to variable pay. Moreover, the results from the experiments of Kuhn and Yockey (2003) show that we should not necessarily assume people to be risk-averse. Most people are overconfident in their own abilities (Kuhn & Yockey, 2003). Therefore, we expect a positive relation between offering variable pay and pay satisfaction. Thus,

> ***Hypothesis 2:*** *Offering variable pay has a positive impact on employees' pay satisfaction.*

Satisfaction with benefits and pay satisfaction

Finally, we examine the impact of the satisfaction with benefits on employees' pay satisfaction. An advantage of benefits is that they are generally less taxed than wages. Consequently, when purchased through the employer, they are less costly than if bought on the market (Artz, 2010). Benefits are perceived as desirable pieces of the compensation package by the employees and therefore they increase job satisfaction (Artz, 2010). Employees view benefits and pay as substitutes, so they are willing to give up a part of their pay in exchange for more benefits (Woodbury, 1983). However, Artz (2010) stated that benefits could have a negative impact on job satisfaction. This is the case if workers have to give up parts of their pay for a benefit they do not necessarily desire. In our study, we interpret the benefits as an auxiliary service from the employer. Employers who offer benefits such as health insurance, employee discounts, or a personal company car, try to decrease turnover and motivate their employees (Dale-Olsen, 2006).

Hypothesis 3: *Employees with a higher satisfaction with benefits have a higher pay satisfaction than employees with a lower one.*

Moderating effect of gender: Pay level and pay satisfaction

Previous research showed that a wage gap between the salaries of men and women exists (Becker, 1975; Blau & Kahn, 1994; England, Farkas, Kilbourne, & Dou, 1988; Sloane & Williams, 2000; Sousa-Poza & Sousa-Poza, 2000). Although these differences exist, studies show that women's pay satisfaction is higher than men's with comparable pay (Crosby, 1982; Keaveny & Inderrieden, 2000; Sauser & York, 1978; Steel & Lovrich, 1987).

As one of the first, Crosby (1982) performed a study examining the satisfaction of women and men working in different organizations. The findings of her study suggested that women experienced higher pay satisfaction than men with an occupation of similar prestige. This result was ground-breaking because women were paid substantially less than their male counterparts (Crosby, 1982). In line with these findings is the study of Sauser and York (1978). They conducted a survey with 480 employees of the Georgia State Government. The subjects were chosen from all ten operating units and represented all job levels from the lowest to the top management. Women reported a statistically significant higher pay satisfaction than male employees in higher-level jobs (Sauser & York, 1978). A new aspect to the gender discussion was added by Steel and Lovrich (1987). They found that pay was equally motivating for women and men relative to other rewards in the workplace.

Despite this fact, women were more satisfied with their income than their male co-workers (Steel & Lovrich, 1987).

A contradictory view suggests that the difference in pay satisfaction of men and women is due to underlying factors, which were not included in the previous studies. Keaveny and Inderrieden (2000) tested what factors account for the paradox of the contented female worker. A further goal of their study was to test the validity of the Major and Konar (1984) model (Keaveny & Inderrieden, 2000). Major and Konar's (1984) study was influenced by the findings of Crosby (1982) and Sauser and York (1978), which suggested that women are not more dissatisfied with their pay then men. They investigated possible causes of gender differences in pay expectations, which are an explanation often offered for this paradox (Major & Konar, 1984; Sauser & York, 1978). The findings showed that women had lower entry-pay expectations and lower career peak-pay (Major & Konar, 1984). The differences in pay expectation might be caused by the job inputs, comparison standards and job facet importance and that women might differ from men in career paths (Major & Konar, 1984).

Keaveny and Inderrieden (2000) controlled for several factors such as career paths, job inputs, career and pay importance, family financial need, spouse's earnings and one's own earnings. The authors assumed that gender differences in pay satisfaction and pay should be reduced if these factors were controlled. The results were that even after controlling for those variables, a significant gender difference in pay satisfaction existed. Moreover the findings provide no support for the Major and Konar model that differences in career paths, job inputs, comparison standards and job facet importance account for gender differences in pay satisfaction (Keaveny & Inderrieden, 2000). If we transfer the aforementioned findings to our research interest, the following hypothesis regarding gender differences can be generated:

Hypothesis 4: *The positive effect of pay level on pay satisfaction is lower for women than for men.*

Moderating effect of gender: Variable pay and pay satisfaction

As shown before, there exists a large body of literature investigating the pay satisfaction of women and men. However all these studies were conducted using pay level

(Crosby, 1982; Keaveny & Inderrieden, 2000; Sauser & York, 1978; Steel & Lovrich, 1987). In our study, we go one step further and test the influence of offering variable pay on pay satisfaction. The literature regarding the variable pay and gender differences has been growing constantly the last few years. Several studies examined the effect of variable pay on the gender pay difference (Booth & Frank, 1999; de la Rica, Dolado, & Vegas, 2010; Jirjahn & Stephan, 2004). The results of these studies are mixed. For example, Booth and Frank (1999) showed that variable pay raises the earnings of women as much as those of men. Additionally, they found that women are less likely to be found in jobs using variable pay as a pay method (Booth & Frank, 1999).

Laboratory experiments suggest that women avoid variable pay schemes and tournaments (Dohmen & Falk, 2011; Gupta, Poulsen, & Villeval, 2005; Niederle & Vesterlund, 2007). One of the laboratory experiments was conducted by Dohmen and Falk (2011). They studied subjects, who were facing the choice between a variable and a fixed payment. One of the findings was that 69.8%of men chose variable-pay schemes compared to only 46.4%of women. The raw gender difference was highly significant (Dohmen & Falk, 2011). Another study by Niederle and Vesterlund (2007) showed that women are less likely to compete than men although there are no differences in performance. A similar study with similar results was conducted by Gupta, Poulsen and Villeval (2005). The studies mainly differ in their design. For Gupta et al. (2005) and Niederle and Vesterlund (2007), the setup decision was between piece rate and tournament and for Dohmen and Falk (2011) between fixed pay and variable pay. The proposed explanations for the differences in behaviour were differences in productivity, risk attitudes (Dohmen & Falk, 2011; Gupta et al., 2005), gender specific preferences and that men are more overconfident (Niederle & Vesterlund, 2007).

A practical study was administrated by Manning and Saidi (2010). They reported that women are less likely than men to be found in jobs with pay-for-performance contracts. However, the difference is much smaller in practice than reported for laboratory experiments (Dohmen & Falk, 2011; Gupta et al., 2005; Manning & Saidi, 2010; Niederle & Vesterlund, 2007). A study with similar research interest as ours was performed by Graham and Welbourne (1999). The study tested the pay satisfaction of women in two different companies before and after the introduction of gain sharing bonus programs. Their findings for pay satisfaction of women before the introduction of the bonus program were in line with previous literature. Namely, they found that women had equal or higher pay satisfaction than comparable male employees.

After the introduction of gain sharing bonus programs, women did not exhibit higher pay satisfaction compared to their male co-workers. The findings even indicated that men experienced a higher satisfaction with the pay structure than female employees (Graham & Welbourne, 1999). Building on the existing literature, we argue that the positive effect of offering variable pay on pay satisfaction is lower for women than for men. Thus,

Hypothesis 5: *The positive effect of offering variable pay on pay satisfaction is lower for women than for men.*

Moderating effect of gender: Satisfaction with benefits and pay satisfaction

Another research interest of our study is the moderating effect of gender on the relationship between satisfaction with benefits and employees' pay satisfaction. Although this effect is of practical and academic relevance, to our knowledge, the literature has not addressed the moderating impact of gender differences on the relation between benefits and pay satisfaction. Moreover, there has been comparatively little research on the effect of benefits in the area of job satisfaction literature.

One exception is the study of Artz (2010) that identified the relationship between employer benefits and worker job satisfaction. The findings show that both women and men seem to value similar benefits (Artz, 2010). The only difference found was that males significantly value profit sharing and females significantly value pensions. Other benefits such as flexible work hours, parental leave and employer provided child care are significantly valued by both (Artz, 2010). Therefore, we conclude that females and males do not differ systematically in their satisfaction with benefits and therefore the effect of satisfaction with benefits on pay satisfaction is identical for both men an woman. Thus,

Hypothesis 6: *There is no difference between men and women concerning the positive effect of satisfaction with benefits on pay satisfaction.*

Methods

Procedure and Participants

The data collected stems from a representative survey of employees in the German- and French-speaking parts of Switzerland taken in 2007. The survey was conducted using structured telephone interviews. The phone numbers were randomly drawn from the totality of telephone numbers registered in Switzerland. Participants were contacted at home and were between the ages of 16 to 65. Before initiating the actual process, the interviewers verified potential participants to be within the target group. Participants had to be employed at least 40% of their time. Self-employed people, apprentices and business proprietors were excluded from the survey. The interviewers were mainly psychology and economics students who participated in an extensive preparatory training before the interviews started. Interviewers conducted interviews in their native language. The questionnaire was created and pretested by language professionals and interviews were conducted between April and July 2007 (Grote & Staffelbach, 2008).

A total of 1,370 employees completed the survey. After data cleansing, 1,326 participants remained. In the survey, 44.1% of the respondents were female, mean age of the participants was 44.28 years (SD = 10.30 years) and their mean organizational tenure was 10.38 years (SD = 9.27 years). For 51.7% of the employees a high school graduation was their highest educational level and 48.3% finished at least a college of higher education. A total of 62.9% of the employees had a full-time employment and 36.3% held a supervisory position. In terms of company size, 37.8% of the employees worked in a large company (> 250 employees). In total, 73.2% of interviews were conducted in German.

Measures

All measures are taken from a survey conducted every year since 2005. Questions and items were presented in German or French in the original survey and have been translated to English for the use in this paper only.

Pay Satisfaction was measured by the means of one single item. Participants were asked to indicate how satisfied they were with the amount of their current pay. The response options range from (1) ‘very dissatisfied’ to (5) ‘very satisfied.’

Pay level: Respondents were asked to indicate their current pay level on a monthly base. Employees chose from six different income ranges: less than 2’000 Swiss Francs, 2’001 - 4’000 Swiss Francs, 4’001 - 6’000 Swiss Francs, 6’001 - 8’000 Swiss Francs, 8’001 - 10’000 Swiss Francs and more than 10’001 Swiss Francs. To enable comparisons, the pay of part-time workers was recalculated into the respective full-time equivalent.

Variable Pay: In particular, wages of employees in a supervisory position are characterized by multiple variable components, such as for example bonus or stock options (Grote & Staffelbach, 2008, p. 85). We therefore measured variable pay dichotomously by asking participants if their pay contained variable components (forced choice with 0 indicating ‘no variable pay’ and 1 ‘variable pay’). If respondents did not know the expression ‘variable components,’ interviewers were allowed to explain it to them.

Satisfaction with benefits was measured by using one item. Participants were asked to rate their satisfaction with benefits on a 5-point Likert-scale ranging from (1) indicating ‘very dissatisfied’ to (5) ‘very satisfied.’ Once more, if respondents did not know what the expression ‘benefits’ implied, the interviewers were allowed to elucidate.

Gender was found to be highly associated with pay satisfaction (Heneman, 1985). It was used as a main effect and coded as a dummy named male, such that 0 was ‘female’ and 1 ‘male.’

Control variables: Personal factors and pay system characteristics can affect pay satisfaction in multiple ways as stated by Heneman (1985). Therefore, age, organizational tenure, highest educational level, language (German), occupational level (supervisory position), employment type (part-time), company size and difference in expected pay were included as control variables.

Older workers are expected to have a higher pay level, resulting in an expected positive relation between age and pay satisfaction (Heneman, Porter, Greenberger, & Strasser, 1997, p. 149). Therefore, age was included and measured in years.

The chances of entering to an even higher pay grade were expected to be smaller with a higher tenure, because employees were already in a very high pay grade. Thus, a negative association with pay satisfaction was expected (Heneman et al., 1997, p. 150). Organizational tenure was therefore included as a control variable and measured in years and months. Furthermore, we controlled for highest educational level which was measured with a dummy variable, 0 indicating 'high school graduation or below' and 1 indicating 'at least college of higher education.' We did so because according to Lee and Martin (1991, p. 59), less educated employees were expected to have a lower pay satisfaction as more educated co-workers. As indicated above, the survey distinguished between German and French speaking participants in order to depict potential cultural differences characterizing Switzerland (Gerber, Wittekind, Grote, Conway, & Guest, 2009; Tschopp, Grote, & Gerber, 2013). Therefore language was used as a control variable with a dummy (named German), where 0 indicated 'French' and 1 indicated 'German.' Heneman et al. (1997, p. 149-150) mentioned that supervisors were expected to be less satisfied with their pay. Therefore, occupational level was used as a control variable and measured with a dummy variable (named supervisory position), 0 indicating 'no supervisory position' and 1 implying a 'supervisory position.' Lee and Martin (1991, p. 59) advise to control for employment type, because two studies found differences in how part-timers and similarly situated full-timers perceived their pay equity, which may affect their pay satisfaction. A dummy variable was used with 0 indicating 'full-time employees' and 1 'part-time employees. '

Moreover, a non-fulfillment of expectations could have an influence on pay satisfaction. Therefore, difference in expected pay was included as a control variable. This approach is in line with the discrepancy theory as noted by Lawler (1971, 1981). The theory suggests that when perceived amount of pay that should be received is greater than the amount received, employees will be dissatisfied with their pay (Lawler, 1971, 1981). The control variable difference in expected pay was measured by using two items on a five-point Likert-scale ranging from (1) 'not at all' to (5) 'entirely.' Participants were asked the two following questions: "Do you expect high pay from your employer for your work?" and "Does your employer offer you high pay for your work?" The calculated difference between offered and expected pay indicated whether the expectations of the employees were fulfilled.

Finally, as an organizational control variable, we included company size measured with a dummy variable where 0 indicated 'small company' (< 250 employees) and 1 'large company.'

Results

Firstly, cross-tabular data, frequency analysis and descriptive statistics were used to depict the sample. Means, standard deviations and correlations of the measured variables are shown in Table I.

To test the direct-effect hypothesis 1 to 3, multiple hierarchical regression analysis was conducted. Hypothesis 4 to 6 contained gender as a moderating variable. Baron and Kenny (1986, p. 1174) described a moderator as "a qualitative (e.g., sex, race, class) or quantitative (e.g., level of reward) variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable." To test hypotheses 4 to 6, we did moderated regression analysis following the well-recognized approach by Baron and Kenny (1986). Thus, we used their proposed three-step approach to test all moderations. In a first step, we entered the following control variables into the model: age, organizational tenure, language, education level, occupational level, employment type, company size, difference in expected pay. Furthermore, we added the different main effect terms as control variables depending on which hypothesis was tested: satisfaction with benefits and variable pay and pay level. In a second step, we entered the main effect terms *gender* and the corresponding main effect for each hypothesis: pay level, variable pay or satisfaction with benefits. In a third step we entered the different interaction terms gender x pay level, gender x variable pay, or gender x satisfaction with benefits, depending which hypothesis was tested.

As proposed by Aiken and West (1991, p. 194), we standardized the variables before creating interaction terms. This approach limited the potential for multicollinearity within the model. Frazier, Tix, and Barron (2004, p. 120) argued that there are benefits to standardizing rather than centering variables, namely facilitations in plotting moderator effects, interpretations and calculations.

TABLE I: Descriptive Statistics and Correlations															
Variables	**M**	**SD**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1. Pay Level	3.97	1.17	−												
2. Variable pay	.34	.47	.162***	−											
3. Satisfaction with Bene-	3.42	1.12	.198***	.172***	−										
fits	1.56	.50	.237***	.149***	.076**	−									
4. Male	3.70	.91	.311***	.076**	.415***	.094**	−								
5. Pay satisfaction	44.28	10.30	.217***	−.077**	.001	.043	.052	−							
6. Age	10.38	9.27	.159***	−.006	.000	.102***	.060*	.518***	−						
7. Organizational Tenure	.48	.50	.469***	.068*	.043	.115***	.113***	−.016	−.082**	−					
8. High Education Level	.73	.44	.000	.064*	.010	.055*	.043	−.054*	−.122***	.000	−				
9. German	.36	.48	.299***	.084**	.099***	.223***	.095**	.068*	.059*	.110***	.058*	−			
10. Supervisory Position	.63	.48	.071**	.198***	.087**	.512***	.089**	−.087**	.067*	.034	−.025	.217***	−		
11. Part-time	.24	.68	.151***	.207***	.075**	.096***	.024	−.025	.122***	.104***	−.066	−.033	.179***	−	
12. Company Size	-.48	1.26	.145***	.014	.342***	.044	.557***	.009	-.010	.054	*	-.014	.002	−.004	−
13. Diff. in expected Pay											.057*				

N = 1,326

Level of significance *p < .05. **p < .01. ***p < 0.001.

All our moderation hypotheses were assessed in distinct ways. In a first step, we studied each moderation hypothesis for significance of the additional variance after adding the interaction term to the regression. In a second step, we examined the significance of the interaction coefficients.

Pay level and pay satisfaction

The results of the regression analysis for Hypothesis 1 and Hypothesis 4 are presented in Table II. The results indicate that the main effects gender and pay level explain an additional 2.7 % of the variance in pay satisfaction. The F-statistics suggest that this is a significant increase in the variance explained ($\Delta F = 30.095$; $p < .001$). Therefore Hypothesis 1, that employees' pay level has a positive impact on employees' pay satisfaction is supported ($\beta = 0.211$, $p < .001$).

The interaction term of gender and pay level explains no additional variance in pay satisfaction ($\Delta F = 0.049$; $p = 0.825$). Contrary to our prediction, gender does not moderate the relationship between pay level and pay satisfaction ($\beta = 0.005$, $p = 0.825$). Consequently, we found no support for Hypothesis 4.

TABLE II: Regression Analysis Results of Pay Level and Pay Satisfaction			
	Pay Satisfaction		
Variables	Model 1	Model 2	Model 3
Controls			
Age	.022	-.013	-.013
Organizational Tenure	.057*	.041	.041
Education Level	.075**	-.013	-.013
Language	.019	.021	.021
Occupational Level	.050*	.005	.005
Employment Type	.053*	.073**	.073**
Company Size	-.016	-.034	-.034
Diff. in expected Pay	.471***	.453***	.453***
Satisfaction with Benefits	.241***	.218***	.218***
Variable Pay	.012	-.006	-.007
Predictors			
Gender		-.030	-.030
Pay Level		.211***	.211***
Moderation			
Gender x Pay Level			.005
Adjusted R^2	.381	.408	.407
ΔR^2		.027***	.000
ΔF		30.095***	.049

N = 1326

Note. Standardized beta coefficients are reported.

Statistical tests are *p < .05. **p < .01. ***p < 0.001.

Variable pay and pay satisfaction

The results for the regression analysis for Hypothesis 2 and Hypothesis 5 are shown in Table III. Results indicate that neither the main effects gender and variable pay ($\Delta F = 0.762$; $p = 0.467$), nor the interaction term of gender and variable pay ($\Delta F = 1.269$; $p = 0.260$) manage to explain the additional variance in pay satisfaction. Thus Hypothesis 2, i.e., offering variable pay has a positive impact on employees' pay satisfaction, is not supported ($\beta = -0.006$, p = 0878). Moreover, gender does not moderate the relationship between variable pay and pay satisfaction ($\beta = -0.024$, $p = 0.260$) and therefore, Hypothesis 5 is not supported.

TABLE III: Regression Analysis Results of Variable Pay and Pay Satisfaction			
	Pay Satisfaction		
Variables	Model 1	Model 2	Model 3
Controls			
Age	-.013	-.013	-.012
Organizational Tenure	.040	.041	.041
Education Level	-.013	-.013	-.013
Language	.018	.021	.020
Occupational Level	.004	.005	.005
Employment Type	.057*	.073**	.072**
Company Size	-.034	-.035	-.035
Diff. in expected Pay	.453***	.453***	.453***
Satisfaction with Benefits	.218***	.218***	.219***
Pay Level	.205***	.211***	.213***
Predictors			
Gender		-.030	-.032
Variable Pay		-.006	-.003
Moderation			
Gender x Variable Pay			-.024
Adjusted R^2	.408	.408	.408
ΔR^2		.001	.001
ΔF		.762	1.269

N = 1326

Note. Standardized beta coefficients are reported.

Statistical tests are *p < .05. **p < .01. ***p < 0.001.

Satisfaction with benefits and pay satisfaction

The results of the regression analysis for Hypothesis 3 and Hypothesis 6 shown in Table IV imply that the main effects satisfaction with benefits and gender explain an additional 4% of the variance in pay satisfaction. The F-statistics suggest that this is a significant increase in the variance explained ($\Delta F = 45.23$; $p < .001$). Hence, Hypothesis 3, employees with a higher satisfaction with benefits have a higher pay satisfaction is supported ($\beta = 0.281$, $p < .001$).

The interaction term of gender and satisfaction with benefits explains no additional variance in pay satisfaction ($\Delta F = 0.284$; $p = 0.594$). As hypothesized, *gender* ($\beta = -0.011$, $p = .594$) does not moderate the relationship between *satisfaction with benefits* and *pay satisfaction*. Consequently, Hypothesis 6 is supported.

TABLE IV: Regression Analysis Results of Satisfaction with Benefits and Pay Satisfaction			
	Pay Satisfaction		
Variables	Model 1	Model 2	Model 3
Controls			
Age	-.015	-.013	-.013
Organizational Tenure	.033	.041	.041
Education Level	-.027	-.013	-.013
Language	.014	.021	.021
Occupational Level	.015	.005	.005
Employment Type	.066**	.073**	.073**
Company Size	-.026	-.034	-.033
Diff. in expected Pay	.524***	.453***	.452***
Variable Pay	.021	-.006	-.006
Pay Level	.237***	.211***	.212***
Predictors			
Gender		-.030	-.031
Benefits		.218***	.218***
Moderation			
Gender x Benefits			-.011
Adjusted R^2	.368	.408	.407
ΔR^2		.040***	.000
ΔF		45.230***	.284

N = 1326

Note. Standardized beta coefficients are reported.

Statistical tests are *p < .05. **p < .01. ***p < 0.001.

Discussion

The present study aimed to determine the effects of different pay elements (i.e., pay level, variable pay and satisfaction with benefits) on pay satisfaction. A second purpose was to find out if gender has a moderating effect on this relationship. To the best of our knowledge, this study is the first to examine the role of gender in influencing the relationship between pay elements and pay satisfaction. Our hypotheses that all three pay elements have a positive effect on pay satisfaction were partially confirmed. However, our assumption that gender moderates between pay elements and pay satisfaction was not confirmed. The results show a positive and significant effect of pay level on pay satisfaction. Therefore, employees' pay level has a positive impact on employees' pay satisfaction. A possible explanation for our finding is given by Heneman, Porter, Greenberger and Strasser (1997). They found that a power function fits the relationship between pay level and pay satisfaction best. This means that a change in pay level is associated with an increasing rate of pay satisfaction. However, in contrast to the traditional view ,the change in pay satisfaction is not simply due to a rise in pay level, but may be due to the symbolic nature of pay level. Therefore, pay level may serves as proxy measure for the employees, because the pay level may vary dependent on individual skills, level of experience of employees or tenure (Heneman, Porter, Greenberger, & Strasser, 1997). Moreover, our finding is consistent with previous findings that pay level has a significant effect on pay satisfaction (Grote & Staffelbach, 2008; Sweeney et al., 1990).

However, we found no evidence that a gender difference exists in how pay level is affecting pay satisfaction. Thus, the positive effect of pay level on pay satisfaction is not lower for women than for men. This result is at odds with the general view expressed in the previously stated literature – that women are more satisfied with their pay even though they earn less than their male counterparts (Crosby, 1982; Keaveny & Inderrieden, 2000; Steel & Lovrich, 1987). Nevertheless, a contradictory view and possible explanation of the results was proclaimed by Loscocco and Spitze (1991). In contrast to the other studies, they found that working in gender balanced work contexts decreases women's pay satisfaction. They were able to show that women do asses their pay relative to their male co-workers. Due to the fact that in most cases women have a lower pay level than comparable male co-workers, this implies that women's pay satisfaction is lowered by pay differentials between women and men. This is one possible explanation for our results since the pay differential between men and women is 18% for Switzerland. In order to illustrate the meaning of this pay differential we are going to use the Canton of Zurich as an example. The Canton of Zurich has the highest pay differential in Switzerland with a difference of 24% between women and men. Only 68% out of this 24% difference can be explained through differences in variables like tenure, education and position (Gleichstellungsfachstellen des Kantons Zürich, 2013).

Another important finding is the significant and considerable positive effect of satisfaction with benefits on pay satisfaction. To our knowledge, this relationship has never been shown before. The positive effect of satisfaction with benefits on pay satisfaction allows us to conclude that employees perceive benefits as an important and desirable piece of their compensation package.

Firstly, this result can be explained through the fact that benefits are an important component of workers compensation (Artz, 2010). This is the case, because benefits also refer to employee welfare programs, recreation options and pension plans and health insurance coverage offered to the employees (Igalens & Roussel, 1999). Secondly, fringe benefits can be substitutes for wages, if workers have strong preferences for benefits (Artz, 2010). For example, sales people may be given the product they are selling for free as a benefit.

As hypothesized, we found no moderating effect of gender on the relationship between satisfaction with benefits and pay satisfaction. Therefore, there is no difference between men and women concerning the positive effect of satisfaction with benefits on pay satisfaction. One explanation for this finding maybe is that man and women do not systematically differ in their preferences for benefits (Artz, 2010).This is in line with the results of Artz (2010), who found that the only difference in the preferences of benefits between men and women was that males significantly value profit sharing and females significantly value pensions.

Contrary to our predictions, variable pay did not have an impact on pay satisfaction and gender did not moderate the relation between variable pay and pay satisfaction. Hence, the positive effect of offering variable pay on pay satisfaction is not lower for women than it is for men. An explanation for these contradictory findings might be self-selection of the employees into jobs (Breaugh, 1983). Our data showed that in industries such as “manufacturing,” “trade and repair business,” “credit and insurance” and “real estate, renting, computer science, research and development and business services” variable pay is common. On the other hand variable pay is less common in industries like “education” and “other services.” Importantly, our data shows that more men than women are working in the stated industries where variable pay is common, whereas in industries where variable pay is less common, the reverse is the case. The observation that women are less likely to be found in jobs using variable pay as a pay method is in line with previous research (Booth & Frank, 1999). The key drivers for individuals for making the decision of participating in a tournament or choosing variable pay are willingness to take risks and relative self-assessment (Dohmen & Falk, 2011; Gupta et al., 2005; Niederle & Vesterlund, 2007). This implies that employees sort themselves into jobs which fit their needs and therefore the mere existence of variable pay has no effect on pay satisfaction and gender has no moderating effect on this relationship (Breaugh, 1983).

Theoretical and Practical Implications

With our study, we enrich the existing research by differentiating between the different pay components instead of looking at the effect of the pay package as a whole. Our results support the already existing literature in two ways. Firstly, we found a positive relation between pay level and pay satisfaction, which is in line with previous studies (e.g., Sweeney, McFarlin, and Inderrieden, 1990). Secondly, our results are in line with the observation that satisfaction with benefits is positively related to pay satisfaction (Artz, 2010). However, in our study, we found that offering variable pay is not positively related to pay satisfaction, which is often claimed in the existing literature. Therefore, our study provides a new aspect to the wide and controversial discussion about the outcomes and perceptions regarding variable pay systems (see e.g. Cox, 2005).

Moreover, our study contributes to the existing literature by testing for a moderating effect of gender on the relationship between the different pay elements and pay satisfaction. However, we did not find a moderating effect of gender, meaning that the impact of different pay elements on pay satisfaction does not differ between men and women.

Our findings have important implications for human resource practitioners when they are deciding on pay package strategies for their companies. Our results do not verify a moderating effect of gender on the relationship between different pay elements and pay satisfaction as it is often claimed in the existing literature (Crosby, 1982; Keaveny & Inderrieden, 2000; Steel & Lovrich, 1987). Therefore, managers should not implement gender customized pay packages. Nevertheless, our results confirmed that the different pay components do affect pay satisfaction differently. Therefore, practitioners should carefully consider which pay packages they offer to their employees. These considerations are becoming increasingly important because nowadays an effective cost management for companies is essential. An optimally to the needs of the employees tailored pay package not only allows the company to satisfy their employees but also to save money. Our results showed that benefits are an important driver in pay satisfaction. Therefore, we propose managers to consider this pay element and to analyze what kind of benefits are supportive for pay satisfaction. Because we assume that needs of the employees differ from one industry to another, we recommend practitioners to run internal staff surveys. In doing so, they can find out what specific needs the employees of their company have.

Additionally, we argue that not only is the offering of different pay elements important, practitioners should also focus on their implementation. In our study, we could show that offering variable pay is not positively related to pay satisfaction. It has been shown that variable pay might display the intended positive impact on employees behavior only if the employees can control the outcome of their actions (Grote & Staffelbach, 2008). Finally, our findings need to be evaluated by practitioners in the light of their business situation.

Limitations and Future Research

As with all research it is important to recognize limitations which may entail future research. Firstly, our data stems from an already existing survey that was conducted in the year 2007. The study design included questions regarding pay level, variable pay and satisfaction with benefits. However, there was no possibility to adjust the questions to our specific requirements. Moreover, no additional questions to the different pay elements were asked. For instance, there was no question about what kind of benefits the participants received or what kind of variable pay scheme (e.g., single or group evaluation) their company is using. These questions could have helped to gain a deeper understanding on how the different pay elements influence pay satisfaction. Although interviewers were allowed to give explanations to the terms benefits and variable pay, it cannot be assured that all participants have the same understanding of these terms. This may have altered the results. Furthermore, our study faces the limitation of possible common method bias. If different variables are measured with the same method, a common method bias (or "monomethod bias") can be caused (Spector, 2006).

Future research about pay satisfaction should focus in particular on variable pay and on benefits. On the one hand, it would be interesting to see which elements of variable pay influence pay satisfaction in either a positive or negative way. This is an important topic because only if variable pay is received as a positive opportunity, it can have a positive effect on the working behavior of employees. On the other hand, research about pay satisfaction should concentrate on benefits. Our study showed that satisfaction with benefits has a positive effect on pay satisfaction. Therefore, an in depth analysis should be conducted to ascertain which particular benefits contribute to a higher pay satisfaction. Furthermore, it could be interesting to analyze if women and men differ in their preferred benefits. Even though we did not find a moderating effect of gender, this might be due to a not specific enough independent variable. It might be that future research find a moderating impact of gender when differentiating between different forms of benefits. This future research is of importance because it allows companies to distinguish the different kinds of benefits in order to focus on the most satisfactory ones. Following this approach may allow companies to save money.

Another limitation of our study is that our findings refer to a particular point in time, and therefore, no casual assumptions can be drawn. For future research, it is important to conduct a longitudinal analysis in addition to these cross-sectional findings. This could be interesting because employees' answers could be affected by cyclical developments like business activity. Also generational cohorts may vary, which can only be respected in longitudinal analysis. Furthermore, the study was conducted in the German- and French-speaking parts of Switzerland and only an extension to the Italian- or even Rhaeto-Romanic-speaking parts would depict an entire picture of employees working Switzerland.

In addition, it is important to recognize that pay satisfaction is not completely explained by the variables pay level, variable pay and satisfaction with benefits. Other factors that may affect pay satisfaction and are not part of the underlying survey like sense of justice should be investigated as well (Grote & Staffelbach, 2008). Moreover, an analysis about the interaction of the different pay elements (e.g. benefits and variable pay) and their influence on pay satisfaction may provide informative results for corporate practice. Grote and Staffelbach (2008) note that compensation packages may vary between different industrial sectors, as for example more variable components are common in insurance and credit sectors. Therefore, it could be interesting to see if employees of sectors with a frequent use of variable components differ from employees of other sectors regarding pay satisfaction.

Conclusion

We found no gender specific differences regarding the impact of different pay components on pay satisfaction. Our analysis confirmed the robust and positive correlation between pay level and pay satisfaction. Furthermore, our study showed that employees who are more satisfied with their benefits have a higher pay satisfaction. Unexpectedly, we could not find a positive impact of offering variable pay on pay satisfaction. Thus, to accomplish pay satisfaction among employees, practitioners should investigate in an elaborated pay package by focusing on pay level and benefits in particular.

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PAY-LEVEL SATISFACTION AND TURNOVER INTENTION: THE MODERATING EFFECT OF LEADERSHIP SATISFACTION

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Abstract: This paper examines the relationship between pay-level satisfaction and turnover intention and leadership satisfaction as a moderator of the relationship between pay-level satisfaction and turnover intention. The data of the Swiss Human-Relations barometer were used. The survey yields data from 1,370 employees, resulting in 1,346 complete data sets included in our analysis. Our analysis reveals that low pay-level satisfaction leads to higher turnover intentions. However, the data did not support the hypothesis that leadership moderates the relationship. Possible explanations for leadership satisfaction's lack of moderation are provided.

Keywords: pay-level satisfaction, turnover intentions, leadership satisfaction

Introduction

Wage levels are intensively debated and highly topical themes in Swiss politics, media and society. Therefore, Swiss people vote in the near future on the minimum wage, and they recently voted on the 1:12 initiative. The 1:12 initiative claimed that the highest wage paid in an organization may not be higher than the twelvefold of the lowest wage paid in the same organization (1:12 Initiative, 2013).

An essential factor in this context is pay-level satisfaction. Pay-level satisfaction is defined as an employee's satisfaction with his/her current base pay, and is a result of the employee's comparison of his/her actual pay level with the pay level he/she thinks he/she deserves (Miceli & Lane, 1991, p. 245-246; Schreurs, Guenter, Schumacher, Van Emmerik & Notelaers, 2013, p. 400). This may be because a person's salary has not only an economic and instrumental value, but it also has an important symbolic value for the assessment of a person's self-worth and status (Blader & Tyler, 2009, p. 447). Hence, pay-level satisfaction represents an individual's goals and aspirations, and depends on the pay fellow co-workers receive (Locke 1969, cit. in Schreurs et al., 2013, p. 401).

Several studies found a broad range of negative outcomes for organizations associated with low pay-level satisfaction such as turnover, turnover intention, absenteeism, employee performance or affective commitment (Williams, McDaniel & Nguyen, 2006, p. 393, 403; Heneman & Judge, 2000, p. 77-79; Kinicki, McKee-Ryan, Schriesheim & Carson, 2002, p. 22; Schreurs et al., 2013, p. 399-401). Research has shown that low pay-level satisfaction increases turnover intention of employees (Schreurs et al., 2013, p. 399; Williams et al., 2006, p. 393, 403). Turnover intention describes the employee's intention to resign, but not the actual act of resignation (Fang, 2001, p. 861). In our study, we focused on the outcome turnover intention because turnover intention can lead to turnover whereon the organization suffers high costs. Cost-causing consequences of turnover are declining productivity, quality, reputation or customer loyalty, constraints in the effective delivery of services, loss of efficiency and performance (Abbasi & Hollman, 2000, p. 333; Coomber & Barriball, 2007, p. 298; Long, Thean, Ismail & Jusoh, 2012, p. 575). According to Boushey and Glynn (2012, p. 1) the replacement of a worker costs a company about one-fifth of this worker's annual salary. Therefore, it is important for companies to impede the cost causing consequences of turnover.

Turnover intention can be categorized as voluntary or involuntary, functional or dysfunctional. According to McPherson (1976, cit. in Wells & Peachey, 2011, p. 26) voluntary turnover is a decision process in which an individual makes a decision to stay or leave the firm. Subject to Watrous, Huffman and Pritchard (2006, p. 104) as Bluedorn (1978, p. 648), functional turnover does not disturb the organization in its everyday business (e.g., loss of a low performing employee), while dysfunctional turnover does disturb everyday business (e.g., loss of a high performing employee). In this study, we focus only on voluntary turnover because voluntary turnover is the employee's own decision to leave the organization. Furthermore, Mobley (1982, cit. in Wells & Peachey, 2011, p. 26) found that voluntary turnover is usually dysfunctional. Therefore, voluntary turnover can be destructive for the organization because the practical implications are often that the high potential employees (and not the low performing) leave the organization on a voluntary basis, and by doing so, their experience, knowledge, and talent leave with them. This results in enormous costs for the companies.

Despite all of the costly consequences of low pay-level satisfaction, fulfilling the expectations of all the employees regarding their pay may be difficult or even impossible for organizations, and that is why some instances of low pay-level satisfaction may not be evitable in organizational life (Schreurs et al., 2013, p. 400-401). A main reason is that pay-level satisfaction evolves to a large extent from the employees' comparison of their actual pay level with the pay level they think they are entitled to. Therefore, employees compare their perceived inputs (e.g., tenure with the firm, work effort, experience and performance) with the perceived inputs and pay levels of co-workers. That makes pay-level satisfaction a dimension that becomes relative subjective perceptions and judgements. Therefore, a company could not solve the problem even by multiplying wages considerably because it is less the absolute wage but more the relative wage that affects an employee`s pay-level satisfaction (Williams et al., 2006, p. 393-394; Schreurs et al., 2013, p. 400-401). Although it is not easy to mitigate some instances of low pay-level satisfaction, organizations may be able to diminish the negative outcomes associated with low pay-level satisfaction.

Therefore, the question arises under which circumstances low pay-level satisfaction does not lead to high turnover intention. The Hay Group (2012, p. 1) study found that for employees, job satisfaction is more important than other factors like the salary they receive. Furthermore, dissatisfaction with the leader is one of the most important reasons for employees to quit their job.

Hence, we propose to focus on leadership satisfaction as a moderator for the relationship between pay-level satisfaction and turnover intention. A review of the literature could identify that the majority of the studies which investigated the relationship between leadership and turnover intention found a negative relation (Choi & Lee, 2012, p. 230). Fang (2001, p. 859, 863), for example, found that low leadership satisfaction is one of the most important predictors of turnover intention. The results of Abbasi and Hollman (2000, p. 337-340), Coomber and Barriball (2007, p. 310) and Fletcher (2001, p. 324, 328-330) have shown that employees can perceive leadership satisfaction by a supportive work environment created by the leader or by a helpful leader who supports in problem solving. Based on these findings, we suspect that such a leader has a moderating impact on the relationship between pay-level satisfaction and turnover intention. Therefore, in the present study, we will analyze whether low pay-level satisfaction induces lower turnover intention for employees satisfied with their supervisor's leadership compared to employees which are dissatisfied with their supervisor's leadership.

By reexamining the relationship between pay-level satisfaction and turnover intention, as well as examining leadership satisfaction as a moderator of the effect of pay-level satisfaction on turnover intention, we make two specific contributions to the literature. First, our study focuses on the specific dimension pay-level satisfaction which is a subcategory of pay satisfaction. Doing so allows us to gain a deeper understanding about pay satisfaction by analyzing the relationship between pay-level satisfaction and turnover intention for a data set from Switzerland. Second, there exists no empirical or theoretical research on the moderator of leadership satisfaction on the relationship between pay-level satisfaction and turnover intention. The aim of our study is to fill these gaps in the existing literature in order to gain a more differentiated and deeper understanding about the possibilities to prevent the negative consequences of low pay-level satisfaction.

Our study uses an empirical analysis based on data from the Swiss Human-Relations-barometer (HR-barometer) 2008. The Swiss HR-barometer is a representative and annually applied research project conducted by the Federal Institute of Technology of Zurich and the University of Zurich, with data collection from 1,370 employees working in Switzerland (HR-Barometer 2013a, HR-Barometer 2013b).

Theoretical Background and Hypotheses

For pay-level satisfaction to evolve, justice is an important requirement so that people are satisfied with their pay and perceive their wage as just (e.g., Dirks & Ferrin, 2002; Williams et al., 2006; Williams, Brower, Ford, Williams & Carraher, 2008; Schreurs et al., 2013; Vandenberghe & Tremblay, 2008). Justice is divided into distributive and procedural justice. Procedural justice is defined as the perceived fairness of the formal decision process (Folger & Cropanzano, 1998, p. 123) and distributive justice as the perceived fairness of the resources received (Cropanzano & Ambrose, 2001, p. 121; Schreurs et al., 2013, p. 400). According to Adams (1965, cit. in Romanoff, Boehm & Benson, 1986, p. 18), distributive justice supposes that employees compare their input/output ratio with those of co-workers. Employees perceive a situation as equal if their input/output ratio is equal to those of other employees. If the amount of pay received is lower than the perceived deserved amount of pay this yields to employees that are dissatisfied with their pay (Williams et al., 2006, p. 395, 403). Therefore, distributive justice plays an important role for pay-level satisfaction to evolve.

If employees perceive themselves in an inequitable situation, employees will try to re-establish balance by reducing inequity (Adams, 1965, cit. in Dittrich & Carrell, 1979, p. 29). A possible action taken to re-achieve balance is psychological withdrawing (Adams, 1965, cit. in Schreurs et al., 2013, p. 400; Miceli & Lane, 1991, p. 238-239, 267-268, 270-271). The psychological withdrawing may result in job dissatisfaction, reduced affective commitment, turnover intention, absenteeism or turnover (Schreurs et al., 2013, p. 401; Adams, 1965, cit. in Dittrich & Carrell, 1979, p. 29). Therefore, it can be said that if an employee perceives injustice regarding his/her pay level, this will lead to lower pay-level satisfaction, leading this employee to have higher turnover intention compared to an employee that is satisfied with his/her pay level.

The influence of pay-level satisfaction on turnover intention is also supported by various studies that have shown that the relationship between pay-level satisfaction and turnover intention is negative (Grote & Staffelbach, 2008, p. 60, 74, 79; Williams et al., 2006, p. 393; Schreurs et al., 2013, p. 399, 400; Williams et al., 2008, p. 639). Following this argumentation, and taking the findings of previous studies into account, we expect our data set to find the following effect:

Hypothesis 1: *Pay-level satisfaction affects turnover intention negatively.*

As mentioned earlier, low pay-level satisfaction leads to an increase in employees' turnover intention that can lead to turnover (Williams et al., 2006, p. 393), which is very costly for a company (Abbasi & Hollman, 2000, p. 334; Boushey & Glynn, 2012, p. 1). Apparently it is of great importance for companies to impede those negative consequences of low pay-level satisfaction, although doing so is not simple. Even if an organization increases the pay level of its employees, the problem would not be solved because it is very difficult or even impossible to fulfill all the employees' expectations regarding their pay (Schreurs et al., 2013, p. 401). This is due to the fact that pay-level satisfaction depends on internal or external comparisons. Internal comparison means that the employee compares his/her pay with the pay of employees working in the same organization. External comparison means that the employee compares his/her pay with the pay of employees working in the same job but in a different organization (Romanoff et al., 1986, p. 18-19). Therefore, it is not surprising that pay level and pay-level satisfaction are only modestly correlated (Williams et al., 2006, p. 403).

Additionally, Dewhurst, Guthridge and Mohr (2009) showed that nonfinancial incentives are more effective to motivate employees than the highest ranked financial incentives like an increase in base pay for instance. This is due to the fact that non-financial incentives are important for employees to feel that the company values them, cares for their well-being and fosters their career development. One of the top 3 nonfinancial motivators is attention from leaders. The Hay Group (2012) study found that dissatisfaction with the leader is one of the most important reasons for employees to quit their job. Dissatisfaction with the leader is an even more important reason to quit the job than the pay level received. Herzberg (1987, p. 9) further mentions that motivators consist of non-financial factors like recognition. These arguments make it pressing to look for an organizational factor other than pay that may be able to moderate the negatively related relationship between pay-level satisfaction and turnover intention. We propose that leadership satisfaction functions as a moderator.

According to Bass and Bass (2008, p. 15), there is a huge debate about the definition of leadership, and many definitions with specific focuses exist (e.g., person, leader behaviour, interaction process between leader and the led). Nevertheless, the various definitions share the opinion that leadership contains an influence process used to achieve a specific objective

(Vroom & Jago, 2007, p. 17). Leadership satisfaction evolves in the employees mind when they trust in the leader, by feeling recognized and appreciated, by working in a supportive work environment created by the leader, or by knowing that the leader is helpful and provides support in problem solving (Abbasi & Hollman, 2000, p. 337-338; Coomber & Barriball, 2007, p. 310; Fletcher, 2001, p. 324). Consider, for example, an insecure employee. If he/she has the opportunity to talk to the leader, and the leader succeeds in reducing this insecurity, it can be followed that through the perceived support and satisfaction with the leader, the employee will be less likely to consider turnover also if his/her pay-level satisfaction is low. According to Abbasi and Hollman (2000, p. 336), leaders can influence the work atmosphere by their management style. Following these arguments it can be said that the leader is able to reduce the employee's turnover intention.

Studies have not only investigated the relationship between pay-level satisfaction and turnover intention, but also analyzed the impact of supervisory variables on turnover intention (e.g., Abraham, Friedman & Thomas, 2008; Bycio, Hackett & Allen, 1995; Choi & Lee, 2012; Coomber & Barriball, 2007; Dirks & Ferrin, 2002; Fang, 2001; Griffeth, Hom & Gaertner, 2000; Long et al., 2012; Martin & Epitropaki, 2001; Russ & McNeilly, 1995; Van Dick, Christ, Stellmacher, Wagner, Ahlswede, Grubba, Hauptmeier, Höhfeld, Moltzen & Tissington, 2004; Wells & Peachey, 2011). In doing so, most research has found that satisfaction with the leadership and turnover intention are negatively related (Choi & Lee, 2012, p. 230; Fang, 2001, p. 859, 863). According to Abbasi and Hollman (2000, p. 333) and Müller (2008, p. 57), leadership is further considered as a component of employee retention. This also implies a reduction of employees' turnover intention because of the leader's behavior. Therefore, empirical evidence suggests that the relationship between leadership satisfaction and turnover intention is negative so that satisfaction with the leader is associated with lower turnover intention.

Although we are not aware of another study that investigates leadership satisfaction as a moderator of the relationship between pay-level satisfaction and turnover intention, Abbasi and Hollman (2000, p. 337-340), Coomber and Barriball (2007, p. 310) and Fletcher (2001, p. 324, 328-330) have shown that employees can perceive leadership satisfaction by a supportive work environment created by the leader or by a helpful leader who supports in problem solving. Thus, we suspect that the resulting leadership satisfaction functions as a moderator for the relationship between pay-level satisfaction and turnover intention.

Hypothesis 2: *Leadership satisfaction will moderate the relationship between pay-level satisfaction and turnover intention, such that low pay-level satisfaction will be less negatively associated with turnover intention for employees with high leadership satisfaction.*

Methods

Procedures and Sample

The data of the Swiss HR-barometer were used. The Swiss HR-barometer is an annual survey of employee's perceptions about their work environment, conducted by the Federal Institute of Technology of Zurich and the University of Zurich. The questions were surveyed by means of a computer assisted telephone interview (CATI) executed between April and July 2007 by drawing a random sample of telephone numbers registered in the German and French speaking part of Switzerland. There was no reminder, but people who could not be reached were called again in the following days. The telephone interviews were conducted mainly by economy and psychology students who took part in an extensive preparatory training prior to the survey. In order to enhance honest answers, people were contacted at home and not at their workplace. Before starting the survey, interviewers checked whether the people belonged to the target group (Grote & Staffelbach, 2008, p. 7-25). The target group included people aged between 16 to 65 years who were in a dependent and paid employment with a contract of at least 40%. Not included in the survey were self-employed people, apprentices and proprietors of a business.

The survey yielded data from 1,370 employees, resulting in 1,346 complete data sets for this study. From the complete data set, 73.5% of the participants were from German-speaking Switzerland and 26.5% were from French-speaking Switzerland. The mean age of the participants was 44.19 years (SD = 10.30 years) and 44.4% were females. The highest completed educational levels of the participants were as follows: (1) mandatory schooling 4.8%, (2) apprenticeship 42.2%, (3) general qualification for university entrance 4.7%, (4) university of applied sciences 17.5%, (5) higher professional school 13.8% and (6) university/MBA/PhD 17%. Average tenure with their current firm was 10.34 years (SD = 9.24 years). The income levels were as follows: (1) less than 2'000 CHF (4.2%), (2) 2'001 – 4'000 CHF (19.8%), (3) 4’001 – 6’000 CHF (30.9%), (4) 6’001 – 8’000 CHF (23.2%), (5) 8’001 – 10’000 CHF (11.3%), and (6) more than 10’001 (10.6%).

Measures

Pay-level Satisfaction was measured with a single item (“How satisfied are you with your current salary”) developed by Heneman and Schwab (1985). The responses were measured on a 5-point Likert scale and the options range from 1 (very unsatisfied) to 5 (very satisfied). While several studies examine overall pay satisfaction, this study only measured one dimension of pay satisfaction, namely, pay-level satisfaction (Grote & Staffelbach, 2008, p. 60, 74, 79; Tett & Meyer, 1993, p. 259-260; Williams et al., 2006, p. 393; Motowidlo, 1983, p. 484). We focus only on the dimension of pay-level satisfaction because the current study investigates the impact of pay-level satisfaction on turnover intention (not the impact of overall pay satisfaction on turnover intention). Such single item measures as pay-level satisfaction are not considered ideal to scale measures. Nonetheless, they have been used frequently in previous studies because they have been shown to be reliable, valid and comparable with scale measures (e.g., Keaveny & Inderrieden, 2000, p. 369; Tschopp, Grote & Gerber, 2013, p. 7; Wanous & Hudy, 2001; Wanous, Reichers & Hudy, 1997). Furthermore, as we are only interested in the satisfaction with the actual pay level and not in the more complex construct of wage satisfaction, we are able, despite the mentioned concerns, to use this single item measure for our analysis.

Turnover Intention was measured by using two items developed by Guest and Conway (2004). The first item was “How likely is it that you will voluntarily leave this organization in the following year?” Responses were given on a 4-point Likert scale, which ranges from 1 (very unlikely) to 4 (very likely). The second item was comprised of four statements to express increasing levels of turnover intention (e.g., “I am currently in the process of trying to leave this job.”, “I am currently in the process of trying to leave this company.”). The respondents had to choose the one statement that applied best to them. Cronbach’s alpha for the two items was 0.73.

Leadership Satisfaction was measured by using two items (“My supervisor declares clear goals with me in scheduled intervals and coaches me to achieve them” and “I get feedback regularly about my performance") developed by Guest and Conway (2004). Based on the results of Abbasi and Hollman (2000, p. 337-340), Coomber and Barriball (2007, p. 310) and Fletcher (2001, p. 324, 328-330), who have shown that employees can perceive leadership satisfaction by a supportive work environment created by the leader or by a helpful leader who supports in problem solving, the two items can be seen as a proxy for leadership satisfaction. The items were assessed on a 5-point Likert scale and the options range from 1 (not at all) to 5 (fully). Cronbach's alpha for the two items was 0.69.

Controls. Because demographic factors can affect turnover intention in different ways (Tschopp et al., 2013, p. 8), we included several control variables as gender, age, tenure, education, language, commitment and income. Various studies with a focus on turnover intention controlled for gender even though there has not been found a significant effect (e.g., Carless & Arnup, 2011, p. 82, 86-87; Tschopp et al., p. 7-11; De Cuyper, Mauno, Kinnunen & Mäkikangas, 2011, p. 258; Carmeli & Weisberg, 2006, p. 199; Houkes, Janssen, Jonge & Bakker, 2003, p. 436). Nevertheless, we control for gender as well to ensure that our analysis does not suffer from lurking effects. Regarding age, studies show that older employees tend to have lower turnover intention (Blomme, Van Rheede & Tromp, 2010, p. 153; Carless & Arnup, 2011, p. 86-88; De Cuyper et al., 2011, p. 258-260; Tschopp et al., p. 15; Sousa-Poza & Henneberger, 2004, p. 120; Houkes et al., 2003, p. 436; Grote & Staffelbach, 2008, p. 72-73). Furthermore, we control for tenure because previous studies have shown that higher tenure within the same organization results in lower turnover intentions (Carless & Arnup, 2011, p. 82, 86-88; Henneberger & Sousa-Poza, 2007, p. 99-106; Gerber, Wittekind, Grote & Staffelbach, 2009, p. 306, 308, 312-314; Aryee, Chay & Chew, 1994, p. 9-12). Research also has shown that well educated employees often have higher turnover intention (Grote & Staffelbach, 2008, p. 72-73; Sousa-Poza & Henneberger, 2004, p. 120; Henneberger & Sousa-Poza, 2007, p. 99-106; Tschopp et al., p. 8-12; Royalty, 1998, p. 429-430; Carless & Arnup, 2011, p. 82, 86-88). We also control for language as a proxy of culture in this analysis, because the German speaking part of Switzerland differs culturally from the French Speaking part (Hofstede, 2001, p. 63), which could impact turnover intention (Gerber, Wittekind, Grote, Conway & Guest, 2009, p. 783; Grote & Staffelbach, 2008, p. 72-73; Tschopp et al., 2013, p. 9, 11-13). According to Ali (2008, p. 246) and Blomme et al. (2010, p. 154), a higher income lowers turnover intention, which is why we also control for income. Finally, we include commitment as a control variable because previous research has shown a negative relation between commitment and turnover intention (Grote & Staffelbach, 2008, p. 72; Blomme et al., 2010, p. 154; Wasti, 2003, p. 312). Commitment was measured by using a three item scale ("Part of a large family", "emotionally tied to the company" and "strong sense of belonging") developed by Guest and Conway (2004). The items were assessed on a 5-point Likert scale and the options range from 1 (not at all) to 5 (fully). Cronbach's alpha for the three items was 0.85.

Age was measured in years, whereas the control variables gender (0 = female, 1 = male) and language (0 = French, 1 = German) were assessed dichotomously. For a better interpretation, we categorized also the highest completed educational levels (lower educational levels: 1-3 = 0, higher educational level: 4-6 = 1) and the income levels (lower income levels: 1-3 = 0, higher income levels 4-6 = 1) dichotomously. Tenure and commitment were dichotomized as well, by entitling values smaller than the mean as 0 and those higher than the mean as 1.

Analysis

The data were analyzed using regression. To test the direct relationship hypothesis, which stated that low pay-level satisfaction leads to higher turnover intention, the independent variable pay-level satisfaction was first regressed onto the dependent variable turnover intention. To test hypothesis 2, which stated that leadership satisfaction moderates the relationship between pay-level satisfaction and turnover intention, we conducted a moderated regression analysis. Consistent with the guidelines outlined by Baron and Kenny (1986), we employed a three-step approach to test for the moderating effect of leadership satisfaction. In the first step, we entered the control variables consisting of gender, age, tenure, education, language, commitment and income. In the second step, we entered the main effect variables leadership satisfaction and pay-level satisfaction into the model and in the third step we entered the interaction term consisting of leadership satisfaction and turnover intention. Consistent with Dawson (2013), we z-standardized the variables before creating the interaction term for the analysis so as to limit the potential for multicollinearity in our model.

Results

Descriptive Statistic

Table I presents the means, standard deviations, coefficient alphas and bivariate correlations for the control variables (gender, age, tenure, education, language, commitment, income), the main effect variables (leadership satisfaction, pay-level satisfaction) and the dependent variable (turnover intention). The reliability of the scales leadership satisfaction and turnover intention met George and Mallery's (2002, p. 231) minimum internal consistency requirements. All of the subscales produced Cronbach's alpha reliability scores between 0.69 and 0.85 (see Table I).

Table I shows that pay-level satisfaction was negatively and significantly correlated with turnover intentions ($r = -0.22$, $p < 0.01$), and leadership satisfaction was negatively and significantly correlated with turnover intentions ($r = -0.23$, $p < 0.01$). Furthermore, pay-level satisfaction was positively and statistically significant correlated to leadership satisfaction ($r = 0.20$, $p < 0.01$). Gender was the only control variable that was not statistically significant correlated with turnover intention ($r = -0.01$, $p = 0.63$).

TABLE I:
Scale means, standard deviations, coefficient alphas and correlations for control variables, main effect variables and dependent variable

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Male	.56	.50	(-)									
2. Age	44.19	10.30	.04	(-)								
3. Tenure	.37	.48	.07**	.45***	(-)							
4. Education	.48	.50	.12***	-.01	-.08**	(-)						
5. Language	.73	.44	.05	-.06*	-.11***	.00	(-)					
6. Commitment	.55	.50	.03	.10***	.13***	.02	.07*	(.85)				
7. Income	.45	.50	.40***	.13***	.13***	.39***	.01	.08**	(-)			
8. Leadership Satisfaction	3.24	1.16	.04	-.06**	.01	.03	.11***	.19***	.14***	(.69)		
9. Pay-level Satisfaction	3.70	.91	.09**	.05	.07*	.11***	.04	.18***	-.27***	.20***	(-)	
10. Turnover Intention	1.92	.87	-.01	-.18***	-.17**	.09**	.08**	-.32***	-.03	-.23***	-.22***	(.73)

N = 1346

Coefficient alphas appear in parentheses along the main diagonal.

* : p < 0.05; ** : p < 0.01; ***: p< 0.001

For male, age, tenure, education, language, income and pay-level satisfaction no Cronbach's alpha is represented in Table I because these variables are one scaled

Test of Hypotheses

Table II presents the results of the regression analysis of the main effect variable pay-level satisfaction and the control variables upon the dependent variable turnover intention. The independent variables explain 17% of the variance in turnover intention (see Table III). The increase in the accuracy of the model is highly statistically significant compared to a random model ($F = 35.40$, $p < 0.001$). As shown in Table II, the regression analysis reveals that pay-level satisfaction leads to slightly higher turnover intention. The coefficients are statistically significant ($\beta = -0.18$, $p < 0.001$). Accordingly, our finding supports hypothesis 1.

TABLE II:
Regression analysis for pay-level satisfaction on turnover intention

	Turnover Intention	
	β Step 1	β Step 2
Controls		
Male	-.01	-.01
Age	-.12***	-.12***
Tenure	-.06	-.05
Education	.10**	.10***
Language	.09*	.09***
Commitment	-.31***	-.28***
Income	-.02	.03
Main Effects		
Pay-Level Satisfaction		-.18***
Adjusted R^2	.14	.17
ΔR^2	.14	.03
ΔF	32.22***	49.47***
F	32.22***	35.40***

N = 1346

* : $p < 0.05$; ** : $p < 0.01$; *** : $p < 0.001$

Note: Standardized beta coefficients are reported.

Table III shows the results of the moderated hierarchical regression analysis for leadership satisfaction and pay-level satisfaction upon turnover intention. The moderator relationship hypothesis (hypothesis 2) predicts that leadership satisfaction moderates the negative effects of pay-level satisfaction on turnover intention. Therefore, the negative effects of pay-level satisfaction on turnover intention would be less pronounced for employees with high leadership satisfaction. By adding leadership satisfaction and pay-level satisfaction, 6% more of the variance in turnover intention can be explained. The increase in variance explained is significant ($\Delta F = 50.12$, $p < 0.001$). Adding the interaction term does not increase the variance explained in turnover intention, and accordingly, this is not significant ($\Delta F = 1.18$, $p = 0.28$). Pay-level satisfaction predicts turnover intention statistically significant ($\beta = -.15$, $p < 0.001$), such that low pay-level satisfaction leads to slightly higher turnover intention. The interaction term is not significant ($\beta = .03$, $p = 0.28$). According to Baron and Kenny (1986, p. 1174), the moderator hypothesis is supported if the interaction term between the predictor (pay-level satisfaction) and the moderator (leadership satisfaction) is significant. Therefore, we have to reject hypothesis 2.

When excluding the interaction term, leadership satisfaction significantly predicts turnover intention ($\beta = -.18$, $p < 0.001$), such that high leadership satisfaction leads to slightly lower turnover intention. This finding does at least corroborate the finding of previous studies (Choi & Lee, 2012, p. 230; Fang, 2001, p. 589, 863).

TABLE III:
Moderated hierarchical regression analysis for leadership satisfaction and pay-level satisfaction on turnover intention

	Turnover Intention		
Variables	β Step 1	β Step 2	β Step 3
Controls			
Male	-.01	-.01	.01
Age	-.12***	-.14***	-.14***
Tenure	-.06	-.05	-.05
Education	.10**	.10***	.09***
Language	.09*	.11***	.11***
Commitment	-.31***	-.25***	-.25***
Income	-.02	.10	.10
Main Effects			
Leadership Satisfaction		-.18***	-.18***
Pay-Level Satisfaction		-.16***	-.15***
Moderation			
Leadership Satisfaction * Pay-Level Satisfaction			.03
Adjusted R^2	.14	.20	.20
ΔR^2	.14	.06	.001
ΔF	32.22***	50.12***	1.18
F	32.22***	38.10***	34.34***

N = 1346

* : p < 0.05; ** : p < 0.01; *** : p < 0.001

Note: Standardized beta coefficients are reported.

Discussion

This paper examined the effect of pay-level satisfaction on turnover intention as well as if leadership satisfaction serves as a moderator of this relationship. Our empirical results showed that employees with low pay-level satisfaction have a higher turnover intention than employees with high pay-level satisfaction. This finding may be explained by distributive justice theory. According to the distributive justice theory (Adams, 1965, cit. in Dittrich & Carrell, 1979, p. 29), workers compare their input/output ratio with those of co-workers and if they perceive themselves as treated inequitably, they will try to re-establish an equitable situation. For pay-level satisfaction to evolve, it is important that the employees perceive themselves as treated fairly (e.g., Dirks & Ferrin, 2002; Williams et al., 2006; Williams et al., 2008; Schreurs et al., 2013; Vandenberghe & Tremblay, 2008), otherwise one possible reaction is an increased turnover intention (Miceli & Lane, 1991). This mechanism may be the reason for our results. Employees compared their pay level with the pay level of referent others. If a feeling of injustice evoked in their mind, the result was a low pay-level satisfaction. This in turn may have led to higher turnover intention (Schreurs et al., 2013, p. 399; Williams et al., 2006, p. 393, 403). Our result is not only in line with the theoretical predictions, but also with the empirical results of previous studies which found that low pay-level satisfaction leads to an increased turnover intention (Grote & Staffelbach, 2008, p. 60, 74, 79; Williams et al., 2006, p. 393; Schreurs et al., 2013, p. 399, 400; Williams et al., 2008, p. 639).

Another explanation for the finding that low pay-level satisfaction increases turnover intention might be that there has been a reversed causality. Therefore, it could be that turnover intention was not caused by low pay-level satisfaction, but low pay-level satisfaction was caused by high turnover intention. Since employees probably look for a job that is paid at least as well as their current job, this may shift their reference point upwards. These increased expectations regarding their pay level may evoke low pay-level satisfaction. Since we used cross-sectional data, such a reversed causality cannot be excluded in our study.

Our empirical results further showed that leadership satisfaction does not moderate the negatively related relationship between pay-level satisfaction and turnover intention. Employees with low pay-level satisfaction have no lower turnover intention if they are satisfied with the leadership of their superior compared to if they are not satisfied with the leadership of their superior. This finding suggests that leaders do not mitigate the negative consequences of low pay-level satisfaction on turnover intention by means of their leadership.

While the result was unexpected, it is not implausible in hindsight. According to Herzberg (1987, p. 8-10), job satisfaction is affected by motivators, while dissatisfaction is affected by problems with hygiene factors. Motivators are factors like achievement, responsibility, recognition or the work itself whereas hygiene factors include factors like supervision or relationship with supervisor. Job satisfaction, in turn, is related to turnover intention (Chow, Haddad & Singh, 2007, p.73, 83). We included a hygiene factor in our model, namely leadership satisfaction. As Herzberg (1959, cit. in El-Din Khalifa & Truong, 2010, p. 136, 142) further points out, satisfaction can only be improved by the motivators, but not by the hygiene factors. This serves as an explanation why leadership satisfaction was not able to moderate the negatively related relationship between pay-level satisfaction and turnover intention.

This argumentation could also hold as an explanation for the finding that low pay-level satisfaction increases turnover intention. According to Herzberg (1987, p. 8-10), salary has properties of a hygiene factor as well as of a motivator. This is also reflected in our study, since low pay-level satisfaction seems to function as a hygiene factor insofar that it increases employees' turnover intention. On the contrary, our results also show that high pay-level satisfaction leads to lower turnover intention. This suggests that the absence of pay-level satisfaction may function as a hygiene factor while the presence of pay-level satisfaction may function as a motivator.

Another study with a similar focus is that of Schreurs et al. (2013), that also examined a moderation effect for the relationship between pay-level satisfaction and turnover intention. They found that employee involvement climate (i.e., information sharing and decision-making climate) functions as a moderator for the relationship between pay-level satisfaction and turnover intention. The critical difference between their study and ours could have been that employee involvement climate may be subsumed under the factor responsibility, which according to Herzberg (1959, cit. in El-Din Khalifa & Truong, 2010, p. 136, 142), functions as a motivator, and is therefore able to increase motivation. In the study of Schreurs et al. (2013), the inclusion of a motivator was able to moderate the relationship between pay-level satisfaction and turnover intention, while in our study, the inclusion of the hygiene factor leadership satisfaction was not.

Theoretical Implications

We contribute to existing theories by being the first study adding the moderator leadership satisfaction to investigate the relationship between pay-level satisfaction and turnover intention, which allowed us to gain a more differentiated understanding about pay satisfaction. This can provide additional insight and direction for researchers in developing comprehensive theoretical models about pay satisfaction. In our study, a hygiene factor (Herzberg, 1987, p. 8) was not able to moderate the relationship between pay-level satisfaction and turnover intention, while in the study of Schreurs et al. (2013) a motivator was able to moderate this relationship. Based on this assumption, we indicated the possible importance of making a differentiation between motivators and hygiene factors when analysing a moderation effect for the relationship between pay-level satisfaction and turnover intention; however, this finding should be examined in further research.

Furthermore, our finding that low pay-level satisfaction increases turnover intention is in line with the predictions from the distributive justice theory (Adams, 1965, cit. in Schreurs et al., 2013, p. 400; Schreurs et al., 2013, p. 401), as well as with previous studies that also found that low pay-level satisfaction predicts higher turnover intention (Grote & Staffelbach, 2008, p. 60, 74, 79; Williams et al., 2006, p. 393; Schreurs et al., 2013, p. 399, 400; Williams et al., 2008, p. 639). Therefore, we could reassure that the theoretical framework on distributive justice and its predictions as well as the findings of previous studies are supported by our data set.

Practical Implications

Turnover intention can lead to turnover (Williams et al., 2006, p. 393), which in turn causes high costs for the company (Boushey & Glynn, 2012, p. 1; Abbasi & Hollman, 2000, p. 333). This makes it important for companies to reduce turnover intention. Therefore, our study offers practical recommendations for human resource management. Our results suggest that managers should not have the illusion that leadership satisfaction would be able to mitigate the increased turnover intention of employees with low pay-level satisfaction. Based on our findings, we suggest that the differentiation between motivators and hygiene factors plays an important role. Therefore, companies could try to focus on motivators such as achievement, recognition, the work itself, responsibility, advancement or growth rather than on hygiene factors like supervision or relationship with supervisor (Herzberg, 1987, p. 8). However these recommendations are not yet confirmed by other studies, thus, we advise caution.

Limitations and Suggestions for Future Research

Our study has several potential limitations. First, we measured pay-level satisfaction only with a single item. Such single item measurements are not considered as ideal regarding reliability, validity and comparability to scale measures (Keaveny & Inderrieden, 2000, p. 369; Tschopp et al., 2013, p. 7; Wanous & Hudy, 2001; Wanous et al., 1997). To address this issue, future research should gather more items for pay-level satisfaction.

Second, since in the HR-Barometer employees were not explicitly asked about their leadership satisfaction, we used a proxy for leadership satisfaction with two items ("My supervisor declares clear goals with me in scheduled intervals and coaches me to achieve them" and "I get feedback regularly about my performance") according to Abbasi and Hollman (2000, p. 337-340), Coomber and Barriball (2007, p. 310) as well as Fletcher (2001, p. 324, 328-330). Future research should explicitly collect data about leadership satisfaction instead of using a proxy for leadership satisfaction.

Third, we used language as a proxy for culture. The culture of the German speaking part of Switzerland differs from the culture of the French speaking part (Hofstede, 2001, p. 63). We found a significant relationship between language and turnover intention as well as between language and leadership satisfaction in our analysis. Since low leadership satisfaction is an important reason for employees' turnover (Hay Group, 2012, p. 1), and cultural dimensions as for example power distance or individualism influence the preferred leadership (Hofstede, 2001, p. 384, 537), the influence of culture on leadership satisfaction or on preferred leadership style should be addressed in future research.

Fourth, a potential common method bias could exist because the data were collected through a self-report survey. The common method bias, more specificly common method variance, occurs when measuring different variables with the same method. This method is often a self-report survey. There are several effects which can cause a common method bias. In the previous study, such an effect could be social desirability (Spector, 2006 p. 221-225; Moorman & Podsakoff, 1992; Podsakoff, MacKenzie, Lee & Podsakoff, 2003). The variable turnover intention could for instance be affected by the effect of social desirability. Hence, the data of the current study could be biased by social desirability such that the respondents could have designated a lower turnover intention than they actually have. Therefore, further research in this field should avoid self-report surveys to overcome the common method bias.

Fifth, the current study is based on the HR-barometer data from 2008, which is a cross-sectional survey and the data were collected at a single point of time. This has implications for the common method bias as well as on the causality. Hence, we are not able to make causal inferences (Rindfleisch, Malter, Ganesan & Moorman, 2008, p. 261-262). As explained before, the possibility exists that turnover intention was not caused by low pay-level satisfaction, but low pay-level satisfaction was caused by high turnover intention. However, the findings of the study are in line with the previous research regarding the relationship between pay-level satisfaction and turnover intention (Schreurs et al., 2013, p. 399; Williams et al., 2006, p. 393, 403). Nevertheless, future research should eliminate the problem of cross- sectional surveys by using longitudinal design.

Conclusion

In order to mitigate costs resulting from turnover, it is important for companies to reduce turnover intention and turnover. A possibility to reduce turnover intention and turnover may be high pay-level satisfaction. However, fulfilling employees' expectations regarding their pay level may be difficult for organizations, and that is why some instances of low pay-level satisfaction and high turnover intention may be inevitable in organizational life (Schreurs et al., 2013, p. 401). We suggested that leadership satisfaction could function as a moderator of the relationship between pay-level satisfaction and turnover intention. Although we found a significant negative relationship between pay-level satisfaction and turnover intention, we did not find a significant effect of the moderator leadership satisfaction. Therefore, the question remains: which other factors than leadership satisfaction may be able to function as moderators in order to reduce the negative consequences of low pay-level satisfaction on turnover intention?

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